

THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

NEW SERIES.

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Improvements on the Farm.

THE latter part of August and the fore part of September may be considered the most favorable part of the year for making improvements on the farm. At this season, the earlier crops have been secured, the cultivation of the later ones has been finished, and the farmer is only waiting for their maturity. In addition to the comparative leisure which is thus afforded, there are other circumstances which render this a suitable period for such operations. The ground is generally drier than at any other time during the year, which permits the labor of men and teams on places which at other times are inaccessible from wetness. This is particularly favorable to the drainage of bogs, and to the excavation of peat or muck for manure. The growth of bushes and shrubs has also reached that particular crisis in which they may be more easily killed by cutting or bruising.

One of the first objects to which attention should be directed in the improvement of the farm, is the eradication of bushes and pernicious plants in fields, along lines of fences, roadsides, &c. These are not only great drawbacks on the beauty of the farm, being unsightly to the eye, and conveying an unpleasant idea of careless and slovenly habits; but they are very detrimental to the pecuniary interest of the farmer. They draw nourishment from the ground which should go to the support of valuable plants, and by propagating themselves, are constantly increasing and spreading the injury. Thistles, docks, briars and thorns, are often allowed to flourish unmolested in the situations mentioned. On the borders of fields they occupy the richest of the soil, and annually extend their encroachments. They are not unfrequently seen in good lands, that are devoted to various crops, and in pastures are quite common—many farmers being apparently regardless of their presence and effects. The great extent of ground that is occupied by these worthless pests, is a dead loss; but besides this, grass and other crops are robbed of moisture by them during drouth, and at other times are soured and diminished in growth by their shade and roots.

It should be an invariable rule with the farmer, to prevent all injurious plants from seeding. This will at all events keep them from spreading—except such as increase by the root. Annual or biennial thistles are easily destroyed by being cut while in blossom and before any seed is matured; and even Canada thistles may be destroyed by following up this course for several seasons in succession. They should be cut *close to the ground*, and just at that juncture when they are in fullest bloom. A few will start, which if untouched will produce seed in autumn; but this second crop should be cut without fail, when in the same stage as the first. The rea-

diest and most effectual mode of destroying Canada thistles, where they occupy ground that will admit of cultivation, is by frequently working the soil with the plow, or some implement that will entirely prevent the growth of the top. No plant can bear to be deprived of its leaves for a long time, and if thistle patches are worked over so often as to prevent the plant from appearing above ground, they will be mostly killed in one season.

Docks and mullens may be pulled up any time before they make seed, though it will be most convenient to pull them after they have shot into stalk. Those which break off may be dug up with a mattock. If cut off two or three inches below the surface, they will not start. The eyes or buds from which shoots proceed, are situated near the crown of the plant. If not cut below these, they will grow. The yellow dock is an exceedingly troublesome plant in grain fields and meadows, and should be exterminated as soon as it makes its appearance, as it spreads very rapidly from seed. The burdock only grows in rich soil, but is frequently allowed to monopolize some of the best portions of the farm. When sheep are allowed to run among them in the fall of the year, the burs adhere to the wool, and occasion much injury by matting it.

Briars and other bushes should be cut the latter part of August. They have then finished their new growth, and the sap is about to "turn," as the expression is—that is, a new set of buds is to be prepared for another year, and the new wood is to be ripened and perfected. If cut at this period, but few sprouts are sent up, and those few are easily bruised to death with a stout stick, while tender, or at the time when frost checks their growth. If sheep are kept on the ground, they will, if the feed is rather short, crop the sprouts as soon as they appear, and if permitted to keep them down for two seasons, the roots will be principally killed. It is an advantage to sow on some grass seed—blue-grass, or red-top—as soon as the bushes have been cut and burned. The seed will take root with the first shower, and the growth of the grass will tend greatly to smother down the sprouts of the bushes. As with thistles, it is important that the bushes should be cut close to the ground.

The reclamation of waste lands generally, but especially those of a wet and swampy nature, may be prosecuted with advantage at this season. With these, drainage is the first object. The water which appears in the form of springs should be first cut off by deep channels along their sources, and these channels should convey the water to such points as will best insure its discharge from the land. As the water is taken away, the soil will settle, more or less, and this settling will facilitate further operations in several ways. The solidity acquired will admit of taking on teams for getting

out stones, stumps and bushes, and all such objects are left by the settling of the earth, mostly on the surface, from which they may be readily removed.

The "swamp holes," which, like plague spots, disfigure the surface of farms, forming the breeding places of worthless plants and disgusting reptiles, and filling the atmosphere with the seeds of human disease, may often be brought into the most profitable cultivation. They frequently comprise the richest parts of the farm, as is proved by the large crops they produce, when redeemed from the effects of stagnant water and wild plants. They are particularly natural to grass, and when properly prepared by drainage, the wild growth exterminated, and the surface properly smoothed, may be brought into valuable meadows by sowing the grass seed about the first of September. Timothy, and the large red-top are the best grasses for such situations; a peck of the seed of the former, with half a bushel to a bushel of the latter, (according to its cleanness,) is the proper quantity for an acre. It may be scratched in with rakes, or by a bush-harrow.

Peat bogs, drained, may be made to produce good crops of many kinds; but grain crops and grass are very liable to lodge down on peaty soils. This is owing in a great degree to the want of silex (flint) in the soil, and in some degree also to the soil being too loose to give the plants a firm standing on their roots. The application of sand or gravel remedies both defects, and when the mineral substance is well incorporated with the vegetable matter, the straw becomes stiff, and the crops stand and mature well. The quantity of sand which it is expedient to apply, varies with the composition of the peat soil, some containing much more mineral earth than other deposits. A coating of an inch to two inches in depth, will, however, be found sufficient in most cases. It may be carted on in winter when most farming operations are suspended.

Peat to be used in the barn-yard, for mixing with animal manure, should be dug out at this season, and piled on dry land, where it may be obtained as wanted. In this situation, the air and rains gradually dissipate the acid which the peat contains when in its natural bed, and which must be dispelled or neutralized before the peat can afford nourishment to plants.

Digging rocks (boulders) from grounds encumbered by them, may now be done advantageously. Stone walls are generally the best and most economical fences in such situations. They have the important recommendation, that when once made in a proper manner, they are perpetual. A trench, two feet deep, and somewhat wider than the base of the wall, should be dug for the foundation, which should be filled with the smaller stones that are not suitable for wall. A skillful and practical wall-layer, will know how to select and place the stones so as to make the most substantial and permanent fence.

Boulders that are not wanted for walls, may be sunk by digging holes under or beside them, so deep that they may fall below the depth to which the plow reaches. Those who have adopted this mode of disposing of boulders, state that it is much less expensive than to get them out by blasting with powder, employing men and teams to take them away.

It is an erroneous idea, though entertained by many farmers, that improvement will not pay. We believe this is in many instances, urged merely as an excuse for carelessness and negligence. It is a safe maxim that, what is worth doing, is worth doing well. We could refer to hundreds of instances

where such improvements as we have spoken of have been made, with a greater profit on the money so expended, than is realized in the ordinary routine of farming. The lands operated on are frequently of little or no value; but by an outlay of fifteen to twenty-five dollars, are made to pay an annual interest of from fifty to a hundred, and sometimes two hundred dollars an acre.

Agriculture of Ohio.

ANNUAL REPORT OF THE OHIO STATE BOARD OF AGRICULTURE.—This document comprehends the information brought out by the operations of the Board of Agriculture for the state of Ohio for the year 1849. The introductory remarks by the President of the Board, M. L. SULLIVANT, Esq., present a comprehensive view of the general progress of agriculture in the state, accompanied with useful suggestions in regard to its further advancement. It is stated that agricultural societies have been organized in more than fifty counties within the state. Township Farmer's Clubs, have likewise been formed in several instances, and weekly or monthly meetings are held by the members for the discussion of agricultural subjects. A spirit of improvement is said to be rapidly diffusing itself among the farming population, the good results of which are beginning to appear.

CROPS.—The crops of the past year, except wheat and fruits, are considered good; but the wheat crop, which ordinarily reaches twenty millions of bushels in the state, it is stated did not exceed one-third that amount. The chief cause of the failure is attributed to the "red rust," in connexion with which the wheat midge (*Cecidomyia tritici*), and the "sun-blight" are mentioned as having increased the injury in some instances. From all causes combined, the total loss to the farmers of the state is put down at thirteen millions of bushels, estimated as equivalent to eight millions of dollars.

The Mediterranean wheat is mentioned as having escaped the rust, in some parts of the state, better than other varieties—(probably from its earliness)—and that the quality of the grain is improving—the millers purchasing it readily with but little or no discount as to price.

Among means for the improvement of wheat culture, the use of the subsoil plow is recommended as follows:—"By its use, two very important points may be gained, less liability to winter killing, by allowing the water to settle down into the soil, and pass off, which also gives the roots of the plant more room to range in search of the requisite quantity of food."

The crop of Indian corn for 1849, is estimated at seventy millions of bushels for the state. The expense attending the transportation of this grain from the interior of the state, is so great that but little of it finds a market, except by its conversion into beef and pork. The improved mode of drying Indian corn by steam is alluded to, and the hope expressed that the process will soon make the exportation of steam-dried meal an article of importance.

The rot in potatoes is stated to have been less prevalent last year, than for several previous years.

Grass is spoken of as "the third if not the second crop in importance" in the state. It is said—"The profits of the grazing interest have been for several years in advance of the grain growing interest, if we take into consideration the relative amount of labor and capital required to carry on these branches of industry, and the uniformity and

certainty of the markets for cattle and beef, giving a fair remuneration upon the investment."

DAIRY PRODUCTS.—The manufacture of butter and cheese in the Western Reserve, is spoken of as being practiced with success; and the new plan of making cheese in large establishments, which take the curd from the dairymen in a fresh state, is thought an improvement as regards the profits of all.

RAISING MULES.—This branch of farming is thought profitable. It is spoken of as follows:—"The raising of mules is becoming an important branch of the stock business, and is decidedly the most profitable of any that the farmer can engage in. They may properly be called a staple stock; for, from an intimate acquaintance with the business, we can state that they afford the most uniform compensation, and they have been less subject to injurious fluctuations, and are fit for earlier sales than any other stock. Their average cost, at six months old, may be put down at twenty dollars per head, and this is a remunerating price to the *breeder* up to that age; and then with common keep on grain, hay and pasture, (if you have it) for the first winter, and with grain and rough feed through the next winter, entirely dispensing with grain afterwards, the *grazier* may calculate, with certainty, to advance his animals in price at least twenty dollars a year. Should he feed on grain all the time, it will pay him twenty cents a bushel for the corn in addition, up to the age of two and a-half to three years, at which time they are put to work or sent to market. The stock of mares in our country is well calculated for producing a superior quality of mules; and with the advantage of a large breed of Jacks, we need not fear competition with any part of the world. These animals are hardy and remarkably healthy, the deaths seldom exceed three per cent.; the care necessarily bestowed upon them is but trifling. The breaking and handling, or quieting, is of no advantage to the seller, the purchasers making that rather an objection than admitting it to be a benefit. Color and slight blemishes do not materially depreciate the price, and the farmer can calculate, with certainty, upon a market whenever he wishes to sell."

WOOL-GROWING.—There are large portions of Ohio well adapted to sheep husbandry. It is remarked—"The grassy plains of the central portion, and the broken lands of the eastern and southern borders of our state, embrace a large territory of but little value for ordinary cultivation, but well adapted to the habits and constitutions of the different breeds of sheep and to the growing of fine wool."

But a great drawback to the successful keeping of sheep is their destruction by dogs, and the Legislature is appealed to for the adoption of some measure to prevent this evil. It is said—"The wolf has become extinct, or nearly so, but his place has been supplied by hordes of ravenous dogs, which have committed more injury within the last five years than all the wolves ever congregated within our borders, and this injury, which annually amounts to a heavy tax, our farmers have been obliged to submit to without redress or remuneration. This liability to injury from the depredations of dogs, undoubtedly retards, in a great degree, the improvement in our breeds of sheep, for but few enterprising men will be at the risk, trouble and expense of importing new and improved breeds of these animals, when they are thus liable to be torn to pieces and destroyed."

[By the way, did not the Legislature of Ohio, at its last session, pass an act in reference to this matter? Eds.]

REARING AND FATTENING HOGS—PACKING PORK.—This is a great business in the state of Ohio. "The number of hogs annually fattened, packed and exported from the state, probably exceeds one million. The average price being about two dollars and a-half per hundred pounds, and the average weight about two hundred pounds, would make the hog crop amount to five millions of dollars. The number of hogs slaughtered and packed in Cincinnati the present season, as we learn from an accurate statement made by the Chamber of Commerce in that city, is a little less than *four hundred thousand*. Within a few years, the business of packing hogs has extended to nearly all the interior towns of the state of any considerable size, and lying near the public thoroughfares, and still the number slaughtered and packed in Cincinnati has not diminished, but has steadily increased, in consequence of the supply of hogs driven to the city from Indiana and Kentucky. The breed of hogs throughout the state consists of a compound mixture; Berkshires, Bedfords, Irish Graziers, and, perhaps, a dozen other varieties, but pure stock of those named are such as to leave but little improvement desirable, except that they should supply the place, or root out the many specimens of "*woods hog*" and "*land pike*," that yet remain in many parts of the state."

NEW ARTICLES OF CULTURE.—Several of these are noticed as worthy of trial; as *broom corn*, which has already been introduced in some of the rich vales; and has produced in favorable situations, about one-third of a ton of cleaned *brush* ready for market, per acre, worth from \$33 to \$42. *Mustard seed* has been profitably grown in some sections. *Flax and hemp* are favorably noticed; the greatest obstacle to their profitable culture being the want of suitable machinery for breaking and cleaning the lint. The *planting of trees* for the production of timber for fences—such as catalpa, chestnut, black locust, &c.—is recommended, the trees to be set in rows around the outside of fields. The orange as a hedge plant is noticed, but its value for a permanent and convenient fence is considered not yet fully ascertained.

IMPLEMENTS.—The introduction of a *steel mould board plow* is recommended, as being better adapted for the rich alluvial lands, on account of its scouring more readily, and keeping cleaner than any other.

A SCIENTIFIC AGRICULTURAL SURVEY of the state is advocated, which it is thought should be commenced as soon as practicable.

A STATE FAIR, under the supervision of the Board, is to be held at Cincinnati on the 11th, 12th and 13th of September next.

READING BOOKS FOR SCHOOLS.—The *Massachusetts Plowman* suggests that an "important improvement in our common schools would be to introduce better matter for *reading*. Instead of putting young scholars to read of the celebrated men of old—warriors mostly, who acquired their renown by shedding human blood—let a part of their reading lessons consist in compositions relating to Agriculture."

KILLING SORREL.—According to the *Michigan Farmer*, plowing sorrel, with a shallow furrow, late in the fall, leaving the roots exposed to the action of the frost through the winter, has been found effectual in destroying that pernicious plant.

Letters from Prof. Norton—No. 8.

On the Nutritive Value of Oat Hay.

ANALYTICAL LABORATORY, YALE COLLEGE,
New-Haven, Conn., July, 1850. }

EDS. CULTIVATOR—In the January No. of the Journal of Agriculture, published by the Highland and Ag. Soc. of Scotland, I notice an article "on Oat Hay, and the relative nutritive value of oats cut green and cut fully ripe," by Dr. A. Voelcker, Prof. of Chemistry in the Royal Ag. College at Cirencester. The subject is one which has long interested me, and I call attention the more readily to the statements made here, inasmuch as Dr Voelcker is an old friend, in whose results I have much confidence. We have worked together in the Laboratory of Mulder, where he was first assistant, and I am sure that he will benefit the cause of agricultural science, now that his whole energies are devoted to it.

The idea of cutting grain while yet quite green, and of making it into hay in the same manner as grass, is not by any means entirely novel. Experiments of an imperfect nature have been made before the present ones, with this same end in view. Some of these have perfectly succeeded, while others have, if not unsuccessful, been at least less striking in their success. We have needed in the occurrence of these unsatisfactory experiments, some general principles upon which to reconcile them if possible, or at least discover the source of error, or by means of which we might more fully attain our object of inquiry. We need also the union of scientific with practical knowledge. Upon this subject, in order to the certain determination of many points, I will copy two or three sentences from Dr. Voelcker's paper.

"On the other hand, I am convinced that practical men will remain in the dark on many of the most important points of agriculture so long as they despise the aid of chemistry, and persist in solving inquiries connected with agriculture by mere blind experimenting; by experiments I mean made without plan, or anything clearly defined and distinctly understood. If those engaged in such *random trials* would bear in mind that nature does not give a precise answer to an indistinct question; and if they would be candid enough to believe, in all cases in which an experiment has failed to answer their expectations, that the experiment itself, or the anticipated result, must be false in principle, and that consequently the fault is their own, and not on the part of nature—a great deal of good would be effected. Unfortunately, however, most men are as quick in condemning the value of the materials used in a bungling experiment, as they are eager to praise and enthusiastic in recommending every result when the experiment proves favorable to their views; and when such an experimenter has some kind of theoretical notion in his head with which the experiment can be *made* to tally, the case is still worse. In this way a great deal of harm has been done, and the progress of scientific agriculture retarded instead of advanced."

There is much of sound practical sense in the above remarks, and every person who has studied over the numerous unprofitable and wearisome discussions, which fill up many of our agricultural papers, will fully appreciate it. It is for want of knowledge as to what they are about, that the contradictory results of most experimenters are to be ascribed.

In the present case, Dr. Voelcker seems to have happily united science with sound practical views, and we consequently have intelligible and reliable statements from him.

The first point to which attention was directed, regarded the proportion of water contained in the straw and grain of the ripe and unripe oat respectively; both samples being of the same variety and taken from the same field. As might have been expected, the green oats contained most water; this is shown by the following table:

Oats fully ripe.		Oats cut green.	
Per centage of Water.		Proportion of Straw to Grain.	
Straw.	Grain.	Dry Straw.	Grain.
38.48	20.65	57.56	46.44
53.30	28.66	65.43	34.56

I have taken the mean of the various results given, as some discrepancy appears in the single determinations. By this table, several general conclusions are indicated—

1. That the proportion of water in the unripe plant is greatest.
2. That the proportion of the *dry* straw in the unripe plant is greatest.
3. That when the plant is dry, the grain bears a larger proportion to the straw than would have been imagined; being, even in the green plant, more than one-third of the whole weight, and in the dry plant nearly one half.

The next step taken by Dr. Voelcker, was to determine the nutritive value of his several samples. In this case regard was had only to the amount of nitrogen contained in them, that being considered the most important ingredient, in estimating any particular variety of nutritious food. He calls the body in oats which contains nitrogen, by the general name of protein; this name applying to a class of bodies that contain about as much nitrogen, and that are about as nutritious, as lean meat when it is dry.

The proportions, or per centages of protein obtained by Dr. Voelcker were as follows:

I. Oats fully ripe—Mean results.

Grain, 15.39 pr ct. of protein compounds.
Straw, 8.46 " " " "

II. Oats cut Green.

Grain, 17.87 pr ct. of protein compounds.
Straw, 11.01 " " " "

No. II. was cut when the stalk and leaf were yet quite green, and the grain milky, but fully formed. They were cut at the same time, the green oats having been sown about one month later than the others.

The conclusions to be drawn from the above results are not only extremely interesting in a scientific point of view, but are of much practical importance.

1. We see in comparing the numbers in the ripe and unripe straw, that the latter contains $3\frac{1}{2}$ pr ct. more nitrogen than the former.
2. That the unripe grain also contains more nitrogen; this may seem a very strange result, but may be explained when we consider the fact, that the unripe oats, although they had not attained their full bulk, had received most of their nitrogenous compounds, and that the after increase while ripening, must have consisted mainly in an accumulation of starch, and other non-nitrogenous bodies.

In addition to the facts established by these analyses, it is to be borne in mind, that the unripe straw is also much richer in starch, gum, sugar and other compounds of the same nature, all of them both nutritious and easily digestible, but which are for the most part in ripening, gradually converted into woody fibre.

Here too the larger quantity of water, which has been already shown to exist in the unripe straw, is to be brought into account. This water helps to render the food more soluble, and more easily digestible by the animal. We find then that an equal weight of the unripe straw and grain, contains more nitrogen, more sugar and gum, and also more water; so that while it is more nutritious, it is also at the same time more easily assimilated and digested by the animal. This last is a point of more importance than is usually imagined. Of two kinds of food containing equal quantities of nitrogen, one may be vastly superior in its effects when fed, and this simply because it can be readily digested; a large portion of the other may even pass through the body unaltered.

Dr. Voelcker gives, in addition to his theoretical results, two letters from farmers who have seen oat hay tried. One of them says, "that when cut fine, oat hay goes one-fourth farther than if the oats and straw had been allowed to ripen."

In many parts of the country, it is very difficult to produce good grass for cutting, but easy to grow quite tolerable oats, at least so far as bulk of straw and appearance of head is concerned. The grain may not fill out well if allowed to stand, but still would serve a good purpose as fodder when cut green and made into hay. There is no loss of the grain by shelling when cut in this way, and the hay would be highly relished by stock.

I have no doubt but the same system would do well in the case of rye, or other grains; hay made from them would also be exceedingly nutritive. The facts given in the report of Dr. Voelcker, are quite sufficient to warrant my calling attention to this subject, and recommending experiments in such districts as feel the need of good winter fodder, and this of a variety that can be obtained without great expense. JOHN P. NORTON.

Action of Soils on Manures.

Professor WAY, consulting chemist to the Royal Agricultural Society, has lately made known the results of some important experiments made by him for the purpose of ascertaining the action of soils on the constituents of manures. Some of these experiments were repeated before the Council of the Society, and the following is the substance of the account reported in regard to them.

On the table were glass filter-jars, containing a red soil from Mr. Pusey's estate in Berkshire. The soil, as the gentlemen present would see, occupied the jars to the depth of five or six inches. Upon one of these Mr. Way poured water obtained from one of the sewers of London. To another filtering jar he added a quantity of the fetid liquid produced in the steeping of flax. Both of these liquids were turbid, highly colored, and exceedingly offensive to the smell; but when passed through the soil, they were no longer the same. The resulting liquid had an earthy smell it is true—a smell always accompanying soils—but was no longer offensive to the nose. Now to what ingredient of the soil was this metamorphosis due? Was it due to the sand acting as a filter? It was easily proved that such was not the cause; and that there might be no doubt on this subject, Mr. Way would pass through a filtering-jar, containing more than nine inches depth of fine white sand, a quantity of cow's urine taken from a tank in the country. The liquid was so far altered by the filtration, that the turbidity was removed, as it would be by filtration through paper; but the co-

lor and disgusting smell remained in all their intensity. Sand, therefore, obviously was not the active ingredient in soils in respect to the power under discussion. The same must be said of the different forms of gravel, which were only coarse sand. The other great ingredient of soil was clay, and to this Mr. Way attributed the power in question. As an experiment comparative with the last, he would pass the same tank water through sand, mixed with one-fourth of its weight of white clay in powder, and they would observe the result was very striking. The liquid coming through was clear and free from smell; indeed it was hardly to be distinguished by its external characteristics, from ordinary water. There could be no doubt then, that the property of soils to remove coloring matters, and organic matters yielding smell from solution, was due to the clay contained in them. Filtration was only a method of exposing the liquid in the most perfect form to the action of the clay, but it was not necessary to the success of the process. In proof of which, Mr. Way stirred up a quantity of soil with putrid human urine, the smell of which was entirely destroyed by the admixture, and upon the subsidence of the earth, the liquid was left clear and colorless. It appeared, therefore, that the clay of soils had the power of separating certain animal and vegetable ingredients from solution; but was this property the only one exhibited? Mr. Way had found that soils had the power of stopping also, the alkalies, ammonia, potash, soda, magnesia, &c. If a quantity of ammonia, highly pungent to the smell, was thrown upon a filter of clay or soil, made permeable by sand, the water first coming away was absolutely free from ammonia. Such was the case also with the caustic or carbonated alkalies, potash, or soda. This was a very wonderful property of soils and appeared to him as an express provision of nature. A power, he remarked, is here found to reside in soils, by virtue of which not only is rain unable to wash out of them those soluble ingredients forming a necessary condition of vegetation, but even those compounds, when introduced artificially by manure, are laid hold of and fixed in the soil, to the absolute preclusion of any loss either by rain or evaporation.

But Mr. Way had found that this property of clay did not apply only to the alkalies and their carbonates, but to all the salts of these bases, with whatever acid they were combined. Here again was a beautiful provision; sulphate of ammonia, when filtered through a soil, left its ammonia behind, but the sulphuric acid was found in the filtered liquid—not, however, in the free state, but combined with lime; thus sulphate of lime was produced, and brought away in the water. In the same way muriate of ammonia left its ammonia with the soil, its acid coming through in combination with lime, as muriate of that base. The same was true of all the salts of the different alkalies, so far as he had yet tried them. Thus lime in the economy of nature was destined to one other great office besides those which had already been found for it—it was the means by which the salts ministering to vegetation became localised and distributed through the soil, and retained there until they were required for vegetation. Quicklime, when dissolved in water, is removed by passing the water through clay or through most soils containing clay; and carbonate of lime in solution is so effectually removed, that hard water may be softened by the same process.

With regard to the extent to which these actions were capable of being carried. It was not to be supposed that we could go on filtering indefinitely with the separation of the salts contained in the li-

quid. On the contrary, the limit was soon reached; but although small in per centage quality, the power was, in reference to the bulk of the soil, enormously great. He had found that a pure clay would absorb, perhaps, two-tenths per cent. of its weight of ammonia—that is to say, 1,000 grains would separate two grains of ammonia; and from reasons which need not then be noticed, a loam or a well-cultivated clay soil would absorb nearly twice as much. Now every inch in depth of soil over an acre of ground weighed about 100 tons. Consequently, ten inches of depth of such soil, would weigh 1,000 tons, and would be adequate to combine with and retain two tons of ammonia, a quantity which would be furnished by about twelve tons of guano. Now, one-sixtieth of this power would suffice for the preservation of the ammonia of an outside dose of guano; consequently, he was justified in saying that the property was practically of immense activity. Mr. Way stated that he had ascertained the extent of the power in different soils and for the different alkalies. The property was decidedly a chemical one; and although he intended only to state the facts, without entering upon their explanation, he might say that he had every reason to believe that he should be able to develop that satisfactorily at the proper time.

At a subsequent lecture Prof. Way stated that he was first led into this train of investigation by having been informed by one or two persons that urine, by being passed through certain filtering substances, might be entirely deprived of its coloring matter and odor. Prof. W. said he was not only deeply interested in these statements, but totally unable to account on chemical principles for the effects thus simply produced; and of so high a degree of importance did he consider them, as fertile in a series of new facts, which would lead not only to new views of chemical combination, under peculiar mechanical conditions, but also to a modification of the theory of the mode by which manure is reserved in the soil until required as food for plants, and to immediate application in practical agriculture, and he lost no time in verifying these results, and endeavoring to account for their occurrence. As he proceeded in this path of inquiry, the new facts, as they rapidly succeeded each other, were such as would have been totally unexpected on the ordinary principles of combination; and which would eventually, he had no doubt, lead to new modes of regarding chemical action when taking place under certain conditions. Prof. W. then proceeded to show experimentally the power of finely divided clay soils to abstract the coloring matter and smell from log-wood water, London porter, putrid urine, infusion of flax, and tank water; and to explain the probable manner in which such soils decomposed the salts of ammonia, arresting that alkali and replacing it by lime; and also by what a beautiful provision of nature the substances valuable as food for plants were retained in the soil, while other results of such decomposition were allowed to pass through it, one of those provisions in the operation of natural laws, which strikingly arrest the attention of the most inconsiderate, and mark the beneficence and wisdom of the Creator, of whose work only perfection is the unvarying attribute.

The committee have resolved that the following subjects be adopted for investigation during the ensuing year:

1. The continuation of the investigation into the absorptive properties of soils, including clays.
2. The nutritive properties of the grasses.

3. The agricultural properties of the chalks and marls.

4. The chemical properties of water, with a view to its effects on irrigation, and on the health of animals.

The Life of the Farmer Favorable to the Pursuit of Knowledge.

EDS. CULTIVATOR—I was highly gratified in reading the article from your correspondent, Hon. F. HOLBROOK, on the question "Should the Farmer be a man of knowledge?" I think he has shown plainly enough, that the farmer should be a man of knowledge, not only as a farmer, but as a rational being, and as a member of society.

But notwithstanding the obvious advantages of knowledge to the farmer, there is a prevailing impression, especially among intelligent young men, that the pursuit of agriculture is unfavorable to the pursuit of knowledge, and the general cultivation of the mind,—that the life of a farmer is a life of drudgery and toil, without any stimulus or opportunity for intellectual improvement,—and that if a farmer is intelligent, he is so in spite of the earthly degrading tendency of his occupation. The celebrated John Foster, of England, in a letter to his mother, speaks of the people in the agricultural parts of the land as "extremely ignorant and dull of apprehension," and then remarks, "Field occupations, with their attendant and consequent habits, notoriously tend to stupify the mental faculties;" that is, those who till the soil are, as a matter of fact, not only ignorant, but this occupation has a tendency to stupify the mind, and keep them ignorant! Now, although Foster might have found, in this country, that the farmers are very far from being "ignorant, and dull of apprehension," he would have found a great reluctance among young men to engage in agriculture, as though it were in fact degrading and stupifying to the mental faculties.

We maintain just the opposite view,—that the occupation of the farmer is favorable to the pursuit of knowledge,—favorable to intellectual health, activity, and vigor of mind, so that if a young man has a taste for knowledge, he should for this very reason, be a farmer, because he can thus gratify this taste for knowledge better than in any other calling.

1. The life of the farmer is favorable to the pursuit of knowledge, because it is favorable for health. It is admitted that agriculture is a healthy occupation—healthy for boys and for men. Many men, of broken down constitutions have renewed their age by leaving the shop or the counting-room, and following the plow. The farmer, who breathes the fresh air, and listens to the songs of birds, and sees so much in nature to interest him, is seldom troubled with hypochondria, dyspepsia, and indigestion, which are as injurious to the pursuit of knowledge as to happiness and health. The man who has been confined in his shop all day, if he has a little leisure, wishes to go out and breathe the fresh air, *as he should do*, to recover his elasticity of mind and body. The shoemaker and tailor cannot take up a book with the same zest at noon or at night, as the man who has been breathing the fresh air. Who does not envy the health, strength, and cheer of the wood chopper, the reaper, the mower or the plowman, not only as a means of happiness but as favorable to intellectual vigor and the pursuit of knowledge?

"Hark! where the sweeping scythe now slips along,
Each sturdy mower, emulous and strong,
Whose writhing form meridian heat defies,
Bends o'er his work and every sinew tries;
Prostrates the waving treasure at his feet,
But spares the rising clover short and sweet.
Come health! come jollity! light-footed, come;
Here hold your revels and make this your home.
Each heart awaits and hails you as its own;
Each moistened brow that scorns to wear a frown."

Can there be any doubt that the occupation which gives such health and cheer to the farmer, is favorable to the development of the mind, and the pursuit of knowledge, especially when we consider the intimate connection between health of body and health of mind, and how many minds are necessarily feeble, stunted, and *sickly*, because dwelling in a feeble and sickly body?

2. The farmer has *leisure* for the pursuit of knowledge. Aside from the leisure which winter evenings, rainy days, and intervals between hurrying seasons of labor afford; he can, almost every day, snatch a few moments, or an hour for reading, *if he has a desire for improvement*. If the farmer chooses to spend his leisure at the stores and taverns, or in idle vacancy, dreaming and dozing away his life, working like his ox, and like his ox only eating and sleeping, he can do so,—but let him not blame his occupation, for if he only has a thirst for knowledge he can gratify it. No laborer has more leisure for improvement than the farmer.

And, besides, the leisure of a farmer is worth more to him, in the pursuit of knowledge, than that of other laborers, not only because, from his good health and spirits, he is better prepared to improve this leisure, but because it will furnish him with food for thought, reflection and inquiry, during the day; his work, much of it, being of such a nature as to afford opportunity for digesting what he has read, especially if it relates to agriculture. The reason many farmers are no more intelligent is, *not because they have no leisure*, but because they *do not improve their leisure*. The most ignorant farmers are by no means the most industrious. Some of the most industrious, efficient farmers of my acquaintance, are the most intelligent also. Nor does their intelligence make them lazy, but rather stimulates them to labor. They take hold of labor, too, with more zeal and interest, and feel less tired at the close of the day, than the mere *drudge*, whose vacant mind is uninterested in what he sees and does. The man who is to work on a compost heap will not do less, but more work, if he spends a few moments in reading an essay or lecture on manures, so that he may labor *intelligently*.

3. Agricultural pursuits have a healthy influence on the mind, and thus favor the pursuit of knowledge. The farmer is free, on the one hand, from the tormenting excitement, anxiety, and perplexity of the merchant and trader, and on the other hand, from the dullness and monotony of the day laborer, or the mechanic, who does one thing the year round. Too much excitement or too much dullness and uniformity are alike unfavorable to mental vigor and improvement. The constant variety of objects which occupy the attention of the farmer, the interest he feels in his crops, and his growing stock, keep the mind active and healthy, contributing not only to his happiness, but to his mental improvement, giving the mind an appetite for knowledge, as well as the body for food. The influences that surround the farmer are as favorable to health of mind as health of body; hence, if a man has a taste for knowledge, he may choose the life of a farmer, as being well adapted to gratify this taste. His labor will not unfit the mind for improvement.

4. The occupation of the farmer affords him an

opportunity to cultivate an acquaintance with the natural sciences, and is thus favorable to the pursuit of knowledge. The shoemaker, or the blacksmith may be interested in the study of meteorology, but his daily occupation does not, like that of the farmer, give him an opportunity to observe the weather, the wind, clouds and storms, and their influence on vegetable and animal life. The mechanic must have his shop, and the lawyer his office to make observations on nature, but the farmer must shut his eyes not to make these observations. He need not leave his work to observe the different kinds of rocks and soils he meets with, and the nature of these soils. If he has a taste for natural history, he need not waste an hour or two in the morning, to listen to the sweet music of various birds, and learn their habits, for his daily occupation gives him the best chance in the world to notice the habits of birds, animals and insects. The book of nature is constantly open before him, inviting him to read her laws. The investigation of the laws of nature affords a pure and exalted source of happiness; but who is so favorably situated to investigate these laws,—*while pursuing his appointed labor*—as the farmer? Who can so well learn the laws of vegetable life, as he who is constantly experimenting on those laws? Who can so well observe flowers, grasses, plants grains and trees, and their habits, as the farmer, whose business it is to cultivate them, and bring them to perfection?

It seems to be a wise provision of our Heavenly Father that the great book of nature, so interesting and full of instruction, should be constantly open to the *tillers of the soil*, who are the largest part of the human family. Farmers are just beginning to see how interesting this book is, and that they may find both pleasure and profit in reading this book—a pleasure that lightens toil, and dignifies labor, making the occupation of the farmer suitable, not only to a *physical*, but to an *intellectual* being.

5. The practical advantage to be derived by the farmer from an acquaintance with science, renders his occupation favorable to the pursuit of knowledge. The natural sciences, Botany, Geology, Chemistry, and many others, are not only interesting in themselves, but intimately connected with the cultivation of the farm. It is by the aid of these sciences that the great improvements in agriculture have been made the past few years, and that we may expect improvements hereafter. If the farmer will not study science because it is interesting, he must study it because it is *useful*,—because it is necessary to the successful cultivation of his land. However interesting science may be, the great mass of laborers, having little leisure, and no particular taste for science, do not pursue it. Even professional men do not. They have no stimulus to pursue it, as the farmer has. For the same reason that a lawyer is favorably situated to obtain a knowledge of law, or a clergymen to obtain a knowledge of theology, a farmer is favorably situated to obtain a knowledge of the sciences. As a lawyer who has a case to try on insurance, on assault and battery, or trespass, will take more interest in examining the law on those subjects than a farmer, or a physician; so will the farmer who is constantly working the soil, mixing manures, and raising crops, take more interest in essays on these subjects than a lawyer, a shoemaker or a mechanic. The farmer will consult Johnston and other authors, for the same reason that a lawyer will consult Blackstone and Kent.

A merchant or mechanic may read an analysis of the different kinds of grain, of the different soils and manures, but he has no such motive to remem-

ber this analysis, and be *interested* in it, as the farmer has, who is constantly raising grain, mixing soils and manures. The man who is applying ashes, lime, or plaster of Paris to his soil, will be more interested in an explanation of the mysterious and diversified agency of these substances, and of the adaptation of each to particular crops, than a man who is writing sermons, or pleading law, or making shoes, or selling goods.

The farmer, therefore, has extraordinary facilities and motives to become acquainted with science, for almost every science aids him in his work, gives him skill and power, as well as pleasure and profit. He can read the theory, and then test the theory by his observation and experiments. Science comes not only to please but to profit; not only to enrich his mind with knowledge but to enrich his farm,—to improve his fruit and stock—to fill his barns and granaries. Formerly, it was thought a farmer had no use for knowledge. Now it is found that no laborer has more use for knowledge. Even the professional man has less use for science than the farmer.

It is not true, then, that field occupations "*tend to stupify the mind*," as Foster remarks. But they have the opposite tendency, to awaken intellect, and stimulate curiosity in the pursuit of knowledge. Nature is constantly before the farmer, proposing problems for him to solve; questions for him to answer; tempting and provoking him to read her laws; by making knowledge contribute to his health, as well as to his happiness. He need not travel out of his way, or leave his work, to find the book of nature, and observe her lessons and laws. No other laborer has so many facilities, or so many inducements to pursue knowledge and read nature, as the farmer, who is constantly experimenting upon the laws of nature.

6. I observe in conclusion that the pursuit of agriculture is favorable to the general development and cultivation of the mind. It furnishes a home for the farmer and his family, a pleasant, *rural home*—one of the most essential means of moral, social, and intellectual improvement. The farmer and his children are free from many temptations to vice, intemperance, idleness and extravagance, which are the bane of intellectual improvement. His life is adapted to develop self-reliance, energy, manly independence, as well as habits of observation, comparison and reasoning. In the rotation of crops, the application of manures, the cultivation of fruit and raising stock, and in planning the work of a farm, as well as in buying and selling, there is abundant exercise for the judgment of the farmer. The business of the merchant is said to be favorable to developing the judgment, but we submit whether the occupation of the farmer does not afford a more enlarged and healthy sphere for the exercise of the judgment, than that of the merchant or mechanic.

I noticed, recently, a paragraph from Elihu Burritt, the import of which was, that the mechanic was more favorably situated than any other class of people, to obtain knowledge and cultivate his mind. But is not the occupation of the farmer quite as favorable to health, and elasticity of both mind and body? Does it not afford as much or more leisure for improvement? Does not his occupation, which is a series of experiments on the laws of nature, give him a far better opportunity to observe these laws, and become acquainted with and interested in them, than that of the mechanic? Do not the numerous successful applications of science to agriculture, afford a greater stimulus to pursue these sciences, as well as a better opportunity for the cultivation of the mind, and the exercise of the judg-

ment, than can be found in the more monotonous employment of the mechanic?

If the farmer, therefore, remains ignorant and stupid, it cannot be for want of opportunity for improvement. He is a workman, an experimenter in the great Laboratory of Nature, where all he sees and hears invites him to observe, and inquire, and learn; where he can employ in his daily labor, whatever knowledge he may possess, and find motives to obtain more knowledge. The means of knowledge, too, are within his reach, so that his life need not be a life of drudgery and toil, unless he chooses to make it so. To be sure, the farmer must *work*, and work hard, and therefore he needs the stimulus of knowledge; for knowledge will stimulate and encourage him to work, so that he can, not only do more work, but do it also to better advantage. *Intelligent labor is the most successful labor.* Many men who find no stimulus to labor, when it is a mere exercise of physical strength, will labor with zeal and enthusiasm, if the *mind* is only interested, at it may be in almost all the work of the farmer.

The occupation of the farmer, then, should be chosen, not merely as favorable to competence, contentment, independence, health, morality, and the social virtues, but also as favorable to the pursuit of knowledge and the cultivation of the mind. JAMES TUFTS. Wardsboro, Vt., June, 1850.

The Reviewer.

Poultry and Poultry Books.

THE POULTRY BOOK: a treatise on feeding and general management of fowls; with numerous original descriptions and portraits from life. By JOHN C. BENNETT, M. D.

THE publishers of this work state, that "to the author, is due the credit of having originated the interest now felt in respect to poultry." The author himself states that he was frequently requested to publish the book, by poultry breeders and fanciers; and in proof of its important character, he tells us that in preparing it, "all accessible authorities have been consulted," though he deems it unnecessary to mention the books which have been laid under contribution, as it would only make a "pedantic display." In addition to this, we are told there has been "a vast mass of correspondence" which has brought out much important matter, "not elsewhere to be found." He also congratulates himself on one or two other points. "Special attention," he says, "has been given to the description of the varieties of fowls, and it will appear on examination that great labor has been expended on this department; and the author flatters himself that a remarkable degree of accuracy has been attained." The "original portraits" of fowls which are given in the book, are deemed by the author to possess "great importance and value," and he thinks they "will add to the fame of the eminent artists" by whom they have been executed. Finally, the author prides himself especially on the character of the department of the book relating to the breeding and management of poultry—a department which, we are told, "is designed to be a *vade mecum*;" and he complacently concludes, that "in no other work, can similar information be found."

These are certainly high claims; how well they are supported, we shall see, as we proceed with our examination of the work.

The chapter on the "origin of the Domestic Fowl," comprising seven pages, is, almost every word, copied from Richardson, with no intimation of credit, except in a few of the latter paragraphs.

The public will judge whether this omission to give the "requisite credit," is in accordance with the principles which should govern authors.

The primary object of the author seems to have been to multiply varieties or breeds of the domestic fowl, or to describe those already known under such names, and in such terms as would lead to the belief that they are rare and desirable. Hence of the Malay tribe of fowls, he has the Chittagong, the Shanghae, the White Shanghae, the Cochin China, the Royal Cochin China. (Burnham's importation,) Cochin China, (Baylies' importation,) Great Malay, the Shakebag, Common Malay, the Great Java, and the Guilderland fowl. Persons acquainted with the fowls described under these names, will readily recognize affinities which prove them to belong to the same stock. They are not arranged precisely in the order here given, but are mixed up, in several instances, with other varieties.

The Chittagong is represented by cuts which purport to be portraits of fowls from Mr. Rugg, who it is declared "is beyond dispute, one of the best fowl breeders in America," and whose fowls, it is said, "excite astonishment and admiration, in all fowl fanciers." A quotation is made from a letter of Mr. Rugg, in which he complains that this breed has heretofore been confounded with the great Malay, whereas he thinks they have "points of difference which will be found to be important." Dr. Bennett attempts to justify this notion by reference to Richardson, whose cuts and description of the Malay he copies, giving the customary credit and marks of quotation, but with an interpolation of two words which entirely change the sense and purport of the language. Richardson says of the Malay,—"This fowl is also frequently called the Chittagong,"—evidently intending to say, as almost every English writer on poultry has said, that the terms Malay and Chittagong, refer to the same fowl; and to prevent this being said, Dr. Bennett inserts the words "but erroneously," making Richardson say "this fowl [the Malay] is frequently, but erroneously, called the Chittagong!" It is proper to notice that there is nothing to show that the words alluded to were added, or that they were not in the original. Without stopping to comment on the *honesty* of this act, I will simply offer one quotation, though many similar passages by various authors might be adduced, to show that the Malay and Chittagong fowl are the same. In the work entitled "*Farming for Ladies*," by the "Author of British Husbandry," page 75, it is said—"The Malay or Chittagong, are natives of the isles of Java and Sumatra, from whence they have been introduced into this country [England,] where they are now common, and are the largest known breed of fowls."

Dr. Bennett makes three breeds of Cochin China fowls. The first of which is simply called "Cochin China," and the cuts accompanying are copied from Richardson, together with that writer's description of the Queen's fowls. One would naturally suppose that these were *royal* fowls, if any could be called such; yet the next chapter has the caption "Royal Cochin-China Fowl—Burnham's importation." Here we have what are called "original portraits" of Mr. Burnham's fowls, and Dr. Bennett triumphantly declares that this representation "is believed to be the only correct delineation of the *species* extant," and he "flatters" himself that it "will henceforth be deemed the standard of comparison!" In the same style of vulgar boasting, it is added that "Mr. Burnham's importation is the best of the Cochin-China *race* which have been brought to this country;" and to crown their lofty pretensions, it is

stated that Mr. Nolan's stock, from which Mr. Burnham's came, "took the premium at one of the agricultural fairs in England, while standing at the side of Her Majesty's fowls." It is not stated that Her Majesty's fowls were in competition for premium with Mr. Nolan's, and yet, notwithstanding the ridiculousness of such an idea, it is obviously intended to make the credulous and ignorant believe it, by saying that Mr. Nolan's fowls were "standing beside" Her Majesty's.

Dr. Bennett pretends to know the precise origin of the Cochin-China fowls, and dogmatically asserts that they "are derived from a mixture of the Chittagongs and Shanghaes; yet he says, "those imported into England, undoubtedly participate in the blood of the Wild Indian game." He thinks this idea is "corroborated by the fact that English writers pronounce them to be game, when speaking of their habits and prowess;" and he concludes that these "facts" (?) prove "the Queen's and Mr. Burnham's fowls to be different from what are commonly called Cochin-Chinas, which are the mere cross of the Chittagongs and Shanghaes." [pp. 46, 47.]

But the "fact" in regard to the Queen's fowls being "game," which was supposed to prove them to be "different from what are commonly called Cochin-Chinas," turns out, by Dr. Bennett's own showing, to be no fact at all; for at the conclusion of the chapter, (page 50) he says, "It may be well to add, that the *London Illustrated News* has fallen into another serious error in respect to the Royal fowls, in saying that 'the cock is game, to the last degree, capable of killing the most powerful game cock in a few minutes.' This is impossible, on account of their size and shape."

Thus what is given as "fact" on page 46, is condemned as "serious error" on page 50!

But there are other strange inconsistencies connected with Dr. B.'s description of the Cochin-China fowl. It will be noticed that he calls them a "*species*" and a "*race*," and yet, strangely enough, on the same page he asserts that they are "derived from a *mixture*" of what he calls distinct stocks! Such palpable contradictions can only be accounted for on the supposition that the author is grossly ignorant of the terms he employs.*

The cuts representing what Dr. B. calls the "Common Malay fowl," are copies of those which Mr. Bement gives for the "Bucks County fowl." We are told—"the best varieties of this *breed* in this country, are the Jersey Blues, the Bucks County and the Boobies." The Jersey Blues are said to have "all the characteristics of the East India fowls," but "have diminished in size by neglect and careless breeding." Yet notwithstanding this "neglect" and diminution of size, Dr. B. gives the statement of Mr. Rugg, that the "he has known in a single instance, caponised fowls of this variety weigh twenty-five pounds a pair," and it is added that the farmers of New Jersey "set a value upon the stock equivalent to that which the Dorking bears in England." Rather singular evidence of "neglect and careless breeding."

The Bucks County and Booby fowls are summarily disposed of as "unprofitable," being, "with what

* Dr. Prichard, in his "Natural History of Man," gives the following definition of species: "Species are simply tribes of plants or animals, which are certainly known or may be inferred on satisfactory grounds, to have descended from the same stocks, or from parentages precisely similar, and in no way distinguished from each other." The same author defines varieties as follows: "Varieties differ from species in this circumstance, that the peculiarities in question are not coeval with the tribe, but sprang up in it since the commencement of its existence, and constitute a deviation from its original character."

are called Malay fowls in the vicinity of New York, degenerate varieties." But the reader will perhaps be surprised to find that notwithstanding the degeneracy of what are called Malay fowls about New York, Dr. Bennett, in describing the "Great Java fowl," refers to specimens in the possession of two persons which he deems "among the most valuable fowls in the country"—the cock weighing at one year old ten pounds, and the pullet nine pounds and a quarter—which were, he says, "purchased in New York as Malays." Thus the Malay fowls about New York degenerate into "Great Javas"!

In regard to the color of these fowls, we are told by Dr. Bennett, in his usual dogmatical style, that "like all other pure Java fowls, they are of a black or dark auburn color!" But who does not know that fowls from Java comprise almost all varieties of color?

But as we proceed in the examination of Dr. Bennett's book, we are more and more impressed with his extraordinary genius. His skill extends even to the restoration of varieties of fowls which have been long extinct; such as the Shakebag, and the crested fowl with white plumage on the body, and a large black top-knot.

The Shakebag fowl was brought into notice in England about eighty years ago, but according to Martin, Dixon, and all late English writers, has not been seen for many years. But Dr. Bennett has borrowed a couple of figures, which he pretends are original delineations of Shakebag fowls imported by Mr. Tucker of the Tremont House, Boston! His description of this resuscitated Shakebag, with some of the circumstances connected with it may amuse the reader. He begins by saying—"This fowl has so many points of affinity with the Malay tribe that there can be no impropriety in associating it with them. It is more beautiful than most of the variety—[what "variety"—the Malay, which he has just called a "tribe?"] the plumage of the cock being extremely brilliant and gaudy."

He then goes on thus—"The fowls delineated here, were imported by Mr. John L. Tucker, of the Tremont House, Boston, and were drawn from the birds [now] in possession of Mr. James S. Parker, of the Samoset House, Plymouth. A glance at the portraits will show that they are magnificent birds. They are exceedingly rare in this country, this being the only importation of which I have knowledge."

The description of the plumage, &c., of these pretended Shakebags is added; but before inserting this, it is necessary, in order to render the subject fully intelligible, to introduce some collateral illustrations. It will be shown that the pair of fowls above alluded to, described by Dr. Bennett in his book, pp. 54 to 56, as Shakebags, were described by him in the Boston Cultivator of August —, 1849, as "Great Malays," accompanied by a cut of the Malay Fowl, copied from Mr. Bement's work! In the latter article he complains that the Malay fowl in this country, has "degenerated by 'close breeding,' until a vestige of the pure Malay can scarcely be traced." (It is rather queer that "close breeding" should destroy the "purity" of the breed, whatever its disadvantages in other respects.) But he continues—"Some of those [Malays] of the purest blood were imported by Mr. Tucker of the Tremont House, Boston, under the name of 'Dorkings,' and were presented by him to Mr. Parker, of the Samoset House, Plymouth." It will be observed that the "habitations and names" of persons agree with those given by Dr. Bennett when speaking of the Shakebag. The particular description, given in one

case as that of the Shakebag, and in the other as that of the Great Malay, will doubtless be read with interest. It is as follows:

Dr. Bennett's description of the Shakebag, "Poultry Book," page 56.

The plumage of the male is brilliant in the extreme, being of a bright red and glossy yellow, a bright red and glossy yellow beautifully blended, and shaded with black, so as to present a most beautiful and captivating appearance. The hackles of the rump are long and drooping, and of a rump are long and drooping, and golden-reddish color. The comb of a golden reddish color. The and wattles are large and single; comb and wattles are large and legs large, yellow, and destitute of single; legs large, yellow, and feathers; tail long and drooping, destitute of feathers; tail long and with rich glossy plumage. The drooping, with rich glossy plume is lively and majestic; in a word, it is the handsomest of any majestic; in a word, it is the of the large breeds, and should be handsomest of any of the large classed with the best varieties. breeds, and should be classed with The hens are of a bright yellow the best varieties. The hens are and glossy brown, good layers, of a bright yellow and glossy good nurses, and very domestic. brown, good layers, good nurses, The eggs are rather large, well- and very domestic. The eggs flavored, and of a pale-reddish are rather large, well-flavored, color. Their flesh is very fine, for and of a pale reddish color. Their flesh is very fine, for so large a fowl.

Of game fowls, Dr. B. claims to have produced a new and superior breed, which he denominates the "Yankee game fowl." He gives of this "breed" what he calls a "portrait taken from life." He says, "this fowl was originally produced between the Plymouth Rock and Indian Game hen." As some may inquire—what is the Plymouth Rock fowl? I give Dr. B.'s account of its origin. "The Plymouth Rock fowl is in reality, one half Cochin-China, one-fourth Fawn-colored Dorking, one-eighth Great Malay, and one-eighth Wild Indian; having five primitive bloods, Shanghae, Malay, Game, Turkish, and Indian." [page 77.] Will he tell us the proportion of these "primitive bloods," and other blood in the "Yankee Game breed?"

But does Dr. Bennett mean that the fowls to which he applies the term "primitive" are really an original, distinct, and pure stock? This certainly would be a legitimate inference from the term. But if we turn to the chapter on "Breeding Fowls," page 194, we find it stated, point-blank, that—"All the breeds in this country are crosses produced by accident or design."

A variety of fowls is described by Dr. Bennett, accompanied by a cut, as the "English Raven fowl." I have never before seen or heard of any variety of fowls under this name. Like the fabulous Shakebags, the white fowl with a black top-knot, and all the new-fangled imaginary varieties, "the pure bloods" we are told "are very rare."

In regard to the Dorking fowl, Dr. Bennett has formerly talked of there being several breeds; thus in his "Essay on the Domestic Fowl, written exclusively for the Boston Cultivator"—and which constituted the chief ground-work of his "Poultry Book," he spoke of the "Pearl-white Dorking," the "Fawn colored Dorking," "Dappled Dorking," &c; but in his book, though he gives a cut and description of the "Fawn-colored Dorking," he comes to the conclusion that "it is really a misnomer," and that the "white and speckled are the only pure varieties"—all others being "hybrids." He gives us the authority of L. F. Allen, that the Dorkings have "both double and single combs," but a few pages further along says for himself, "it should be remembered that all pure Dorkings have rose combs," &c.

Passing over Dr. B.'s description of several varieties, without stopping to comment on many of his vague and undefineable ideas, we come to the Po-

lish, or Top-Knot fowls, of which we are presented with some striking original illustrations. The skill of the "artist," prompted by the ingenuity of Dr. Bennett, has brought out a cut of the white fowl with a black top-knot, which, if it ever existed, is considered by most late writers as having been long extinct. Dr. B. says—"This variety of Polish fowl is the most pure and unmixed of the three; it is indeed, the uncontaminated descendant of the great fowl of St. Jago. Its color is a brilliant white with a jet black top-knot." He states that various applications have been made to persons in Germany and Poland to procure specimens of this breed at any cost, but that the answers were, "they were no longer to be had." He remarks—"I have never myself seen a specimen of the breed, and have every reason to suppose it to be extinct or nearly so." And yet, as if to confound his own language, he says in the next paragraph—"Of this variety there are some beautiful specimens in this country!"

Dr. B. speaks of the "Dominique fowl" as a "very perfect breed," adding that he has "never seen the least variation in their appearance for the last thirty years. * * * Why it is that no perfect bloods should have escaped description by poulterers, I am unable to divine."

But suppose the question is asked—what constitutes a Dominique fowl? It may not be easy to give a definite answer; but it will probably be said that the term Dominique applies to fowls of a particular color. It is a fact, however, that the markings of plumage which have given rise to the application of this term, are not confined to one breed, but are found among several breeds. They are very frequently seen among the common fowls, usually called "Dunghills," and have been met with in fowls imported as Dorkings, as well as in the Jersey Blues, &c.; so that Dominiques may be said to occur in many breeds, but of themselves are no breed at all.

Dr. B. closes his descriptive list of *thirty-three* varieties of fowls, with the "African Bantam," of which he says—"They are the best of all the Bantam race, yet I have never seen them described in the books on ornithology." No! and he never will, till men who know nothing of "ornithology" make "the books!"

From the space which this article has already occupied, I am induced to pass without notice, Dr. Bennett's vagaries in regard to turkeys, geese, ducks, &c., together with those parts of his work relating to the management of poultry, and proceed to an examination of his remarks on "Breeding Fowls," though I shall not attempt a detailed criticism of the chapter.

Dr. B. observes, in the outset, that in the treatment of this subject generally, "there is a loose and indefinite use of terms, which serves only to distract and confuse the inquirer." If I am not mistaken, the readers of Dr. Bennett's book, may with propriety complain of the "loose and indefinite use of terms"—not less in this chapter than in the parts of the work already noticed. For example, he pretends to lay down certain "physiological principles," which, he thinks, if "well understood and faithfully applied, will prove of great value." The first of these principles is as follows:

"When animals differing in order, genus, and species cohabit, no offspring results."

Now what a strange compounding of terms does this proposition comprise! And the sense is so obscure that it is doubtful what idea it was intended to convey. If the meaning is that animals of

different orders are incapable of producing an intermediate offspring, it will be admitted; but of what use are the terms genus and species in this connexion? Animals of different orders, must of course be of different genera and species. The effect of this "loose use of terms" therefore, can only be to "distract and confuse the inquirer."

Again, though the proposition be admitted as correct, so far as it relates to orders, it is incorrect in its relation to genera and species; for offspring is sometimes produced between animals of different genera, and not unfrequently between those of different species. Thus Dr. Morton says—"Hybridity occurs not only among different species, but among different genera; and the cross-breeds have been prolific in both cases."* For instance, the Guinea-fowl, which belongs to the genus *Numida*, and the common fowl, genus *Gallus*, have been known to breed together. I have myself seen hybrids which were the result of this union; and Dr. Morton mentions two which he had seen, and refers to three others of which he had heard.†

Dr. Bennett's second proposition is, that with "animals of the same order, differing in genus and species, the progeny is sterile in the first generation, as with the mule, the mongrel-goose," &c.

By "mule," it is supposed he means the joint offspring of the horse and ass; but what naturalist regards those animals as "differing in genus?" Or is this only to be received as part of a new classification which the learned Doctor intends to introduce?

Again, Dr. Bennett cites the "mongrel goose" (as if there was only *one* mongrel goose,) as an example of sterility. What is a mongrel? Webster's definition (which is within reach of all) is "an animal of mixed breed." But are all geese which are of "mixed breed," or all "mongrels" sterile? "Looseness of terms," indeed! The Canadian wild goose and the common domestic goose, are of distinct species, and their joint offspring are properly *mules*. They do not breed.

Dr. Bennett's third proposition is, that with "animals of the same order and genus, differing in species or variety, only, the progeny becomes barren, in the second generation, as with the mulattoes."

Well, if the "natives" are not astonished at this, the Doctor may give up! The progeny of animals "differing in species or variety only, becomes barren in the second generation!" What gloomy philosophy! How soon must vanish from earth those *transcendent* fowls, the "Yankee Games," the "Plymouth Rocks," the "Pride of Indias," &c.,—all crosses of different varieties.

Yet Dr. Bennett, in another part of this chapter, tells us—"The best breeding is to cross or mix the races. This process improves the breeds in every respect. The *best* mixture is the Yankee Game with the Cochin-China fowls. This produces a *race* [?] of equal proportions of Wild Indian Game, Spanish Game, Chittagong, and Shanghai. Such a mixture gives great size, fine flesh and brilliant plumage; and at the same time the *breed*, [not "race" as above] will be very *prolific*!" [p. 202.]

Whether Dr. B. regards whites and negroes as of different species, or only different varieties, does not appear, and I have no occasion to enter on the discussion of the question. His conclusion in respect to mulattoes, I leave to the observation of others without comment.

Dr. B.'s fourth and last proposition has no special connexion with the main subject, and if it had it is

* Sillman's Journal, vol. III, p. 212.

† Ibid. p. 204.

of a character which would prevent its insertion here. As before remarked, it is impracticable to notice all the strange things in this boasted "*vade mecum*," and many are passed over. I shall merely call attention to one or two more passages.

Dr. Bennett attempts to show that in certain cases in-and-in breeding may be practiced "with perfect impunity." These cases are where the breed is pure. Thus, he says,—“if the breed is pure, as with the rabbit, you can breed close,” &c. Are all rabbits of one breed? Or if not, are all rabbits of pure breed?

Under the head of "Preserving the Distinctive Breeds," Dr. Bennett presents us with the following paradox:

"When a fowl exhibits any special marks indicative of all the races or breeds from which the cross originated, it is a sure evidence of extraordinary purity of blood, and of the superior excellence of the race." [p. 201.]

Now, if this "loose and indefinite use of terms," does not "distract and confuse the inquirer," it must, at least, excite in his mind both astonishment and disgust! "Special marks indicative of" a mixture of "races or breeds," are "sure evidence of extraordinary purity of blood!" If the above paragraph had appeared in the "*Asylum Journal*," among specimens of the composition of insane persons, who would have regarded it as out of place? Or who can say that it is appropriate to any other place?

The work closes with an appendix, which seems chiefly designed to show that some new light had been obtained in regard to fowls after the matter had been principally prepared. Thus the Chittagongs, with a description of which the book is commenced, have become the "*Imperial*" Chittagongs in the appendix. The closing paragraph indicates that we have not yet reached the end of this humbuggery and imposition. The credulous public is enjoined to hold fast, like the old woman who fired off the musket containing seven charges, as "there are more to come yet."

"Subsequent editions of this work will be embellished with portraits from life, by the same distinguished artist, F. A. Durivage, Esq., of my *Pride of India* fowl, from my own stock; my *South American Eagle* fowl, (a very rare and singular bird,) from the stock of J. Jacob Bower, Esq., of Baltimore, and now in the possession of Mr. William Nickerson, of Plymouth; the *Java Game Fowl*, from the stock of Mr. George C. Pierce, of Danvers; and numerous other rare and choice breeds, (a full history of sixty different breeds and varieties being promised by Mr. Bower alone;) and will contain an additional fund of practical matter from some of the best breeders in this and foreign countries, with whom the author is in correspondence."

With this I leave Dr. Bennett's "*Poultry Book*," though not because all its ridiculous absurdities and palpable contradictions have been pointed out. The book abounds with those of similar character. If any apology is necessary for the space I have devoted to this extraordinary production, it is to be found in the fact, that people who have no opportunity of knowing, beforehand, the character of the work, are induced to purchase it. If my remarks shall tend to prevent the outlay of money for that which is, in many respects, worse than useless, they will, at least, do the public some service. OBSERVER.

☞ Beware of little expenses, a small leak will sink a great ship.

The Horticultural Department.

CONDUCTED BY J. J. THOMAS.

French Names of Fruits.

The name "*Fondante d'Automne*" is pronounced at least one hundred thousand times annually in this country, of which at least ninety thousand are bad French, hybrid French, or awkward anglicisms. Very few of our fruit raisers understand French pronunciation; and when they meet with foreign names, they encounter them quite as awkwardly as a Moor would manage a printing press, or a Burman one of McCormick's reapers. The evil of these names, it is true, is not very serious, but they are rendered exceedingly inconvenient by their constant occurrence in use. All, except the few who wish to be modish, desire some way of escaping this continual annoyance.

These names should be modified or altered. Some of them, such as Belle Lucrative, Passe Colmar, Forrelle, Crassane and others, the sound of which is somewhat similar in both tongues, will assume a modified English pronunciation, like Jargonelle and Bonchretien. But there are others, not quite so easily passed, such as *Beurre Gris d'Hiver Nouveau*, *Sucree d'Hoyerswerda*, *Delices d'Hardenpont*, and *Jalousie d'Fontenay Vendee*. Some of these sorts are likely to become generally cultivated—but the names are really terrific, and cannot possibly be retained. Who shall alter them? No single individual should ever think of setting about coining new names for old fruits. But the case is quite different with a large body of intelligent men. Who would be more competent than the American Pomological Congress? Ought not this body to take up the subject, and propose a revised list at their next session? To make this suggestion a little more distinct, let us take up a few names, and propose how they might be altered, or translated into English, or abridged, leaving for others to amend and enlarge these suggestions:—

For <i>Fondante d'Automne</i> ,	we might say,	<i>Autumn Melting</i> .
" <i>Paradise d'Automne</i> ,	"	<i>Autumn Paradise</i> .
" <i>Beurre Gris d'Hiver Nouveau</i> ,	"	<i>Grey Winter Beurre</i> .
" <i>Beurre d'Arenberg</i> ,	"	<i>Arenberg</i> .
" <i>Bonchretien Fondante</i> ,	"	<i>Melting Bonchretien</i> .
" <i>Duchesse d'Angouleme</i> ,	"	<i>Angouleme</i> .
" <i>Beurre Diel</i> ,	"	<i>Diel</i> .
" <i>Glout Morceau</i> ,	"	<i>Morceau</i> .

We shall leave the name *Louise Bonne of Jersey*, for some one of greater ingenuity to re-model.

In many instances, the simple translation of the foreign name might be at once adopted, as for

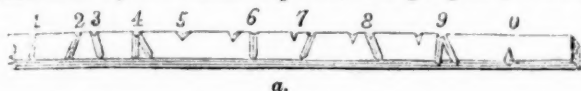
<i>Doyenne d'Ete</i> ,	say	<i>Summer Doyenne</i>
<i>Rambour d'Ete</i> ,	"	<i>Summer Rambo</i> .
<i>Muscat Petit</i> ,	"	<i>Little Musk</i> .
<i>Rousselet Hatif</i> ,	"	<i>Early Rousselet</i> .
<i>Franc Real d'Ete</i> ,	"	<i>Summer Franc Real</i> .
<i>Bergamotte Suisse</i> ,	"	<i>Swiss Bergamot</i> .
<i>Pourpree Hative</i> ,	"	<i>Early Purple</i> .
<i>Violette Hative</i> ,	"	<i>Early Violet</i> .

Labels—Timely Hint.

"A nurseryman," says S. W. COLE, "lost \$500 by budding from a falsely marked tree before it bore." Another nurseryman sold several hundred trees of the Black Mazzard for the Napoleon Bigarreau, by a similar mistake in marking one for the other. Thousands of trees were set out last spring, by purchasers all over the country, and the labels are neglected and are becoming lost. Now a great deal of the present confusion in the nomenclature of fruits originated in this way. Nothing was thought of the names till the trees began to bear. Curiosity was then excited, conjecture was substi-

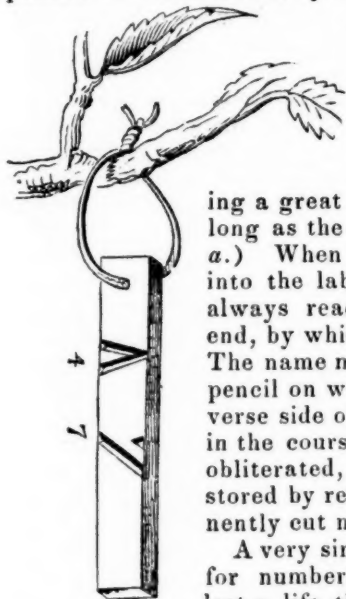
tuted for knowledge, and innumerable mistakes were made and multiplied.

Where trees have been set out in rows, it is very easy to register the names one by one in each successive row, in a book kept for that purpose, which



may be referred to at any moment for fifty years to come. This, therefore, is the first thing to be done, and should not be neglected another day by any one who abhors confusion.

To indicate the number of each tree, and save the trouble of counting the row, wood labels may be suspended to a side branch by means of a strong copper wire, made in a large loop so as not soon to cut the bark.



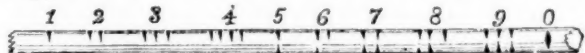
The numbers may be cut into the labels with a knife, by following the above marks, last-

ing a great number of years, or as long as the wood remains. (Fig. a.)

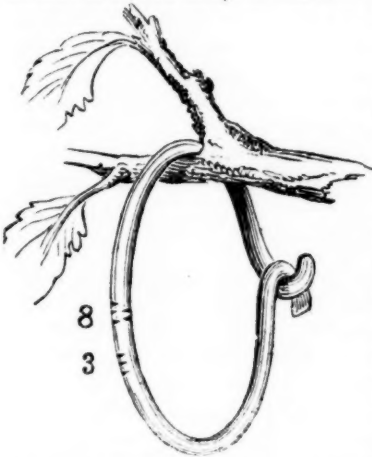
When these numbers are cut into the label (Fig. b.) they are always read from the suspended end, by which no mistake is made. The name may be written with a pencil on white paint, on the reverse side of this label, and when in the course of years it becomes obliterated, it may be at once restored by referring to the permanently cut numbers.

A very simple and original label for numbering trees, which will last a life time, is made of large

copper wire, with the numbers marked with a



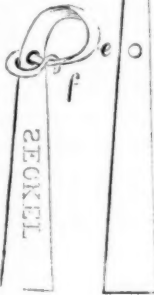
three-cornered file, as shown by fig. c. The wire



is twisted round a side limb as in Fig. d. These labels are made and marked with great rapidity.

Durable labels, containing the full name, are conveniently made by cutting strips of sheet lead about 8 inches long, 3-4ths of an inch wide at one end, and tapering

to a point at the other. A hole is punched through at the middle, and the smaller end is brought round the branch, and secured by drawing it through the hole and giving it a twist. Fig. e. f. The letters are to be previously stamped into the lead by printer's type. Sheet tin may be used instead of lead, using a sharp awl to write the name by cutting through the tin coating, oxidation soon rendering the letters distinct.



Early Notices of the Curculio.

The Curculio is a native of the United States, and I believe not known on the Eastern Continent. I have turned to the great "NATURAL HISTORY OF NEW-YORK," but find nothing on Entomology, and presume that this important field has not been explored under the patronage of the State. How far this destructive insect has been found to the east, west, north, and south,—would be an interesting inquiry; and I would feel thankful to any of your correspondents for contributing such information in regard to its limits, as they may happen to possess.

In Darlington's "Memorial of John Bartram," lately published, I find the following notice from Peter Collinson of London, dated "March 14, 1736-7," in which he refers to J. B.'s "very particular account how your plums are destroyed by an insect. Pray change the stock, and graft plums and nectarines on peach stocks, which being a vigorous, free stock, and not liable to these insects, may succeed better. Pray try; I have a great opinion of its succeeding."

A project evidently so ineffective, led me at first to doubt whether the Curculio was the insect referred to; but letters of a later date, clearly settle this question.

J. Bartram ("April 16, 1746,") speaks of the sloe, "which we have had in the country these fifty years. I plant them about my hedges, where it grows to a large size. The blossoms are prodigious full, but never one ripe fruit. They were bit with the insect, as all our stone fruit is, but the peaches; and some kinds of cherries overgrew them."

It would appear from what follows that the proposed remedy was not very cordially received by the American Botanist,—for in reply to some remarks which are now probably lost, P. Collinson says, (April 24, 1746,")

"Though thou canst not see, yet I have told thee what inoculating on a peach stock may do. If I am not out in my conjecture—as it is a free stock, and sends up its sap plentifully, it may assist the nectarine and apricot at a season when supplies are wanting. As thou has tried the north side of buildings, and sides of water courses, &c., to no purpose with plums, pray give the other fruits as fair a chance.

"To prevent the depredations of the Beetle, I confess, is not so easy as some other bad effects; yet as we know the duration of this insect is but short, if while he is so noxious, some contrivance could be found out to disturb or destroy him, you then might hope to taste a nectarine,—one of the most delicious fruits in the universe, and much exceeds a peach, in a rich vinous-flavored juice. And an apricot is also one of the fine fruits. Last year, our standards were overloaded, which were allowed to excel the wall fruit.

"Suppose as soon as this beetle is discovered, if the trees were to be smoked, with burning straw under them, or at some distance, so as to fumigate their branches at a time the beetles are most liable to attack the fruit; or if the trees were to be squirted on by a hand engine, with water in which tobacco leaves were soaked; either of these two methods, I should think, if they did not totally prevent, yet at least would secure so much of these fine fruits as would be worth the labor of people of circumstances, who are curious to taste these delicious fruits in perfection.

"I take it, the reason the plum succeeds so well, is the frequent shaking the trees, by being planted in a frequented place. The beetles are tumbled off,

or else are disturbed, and frightened from settling on the trees."

In a paper read before the Philadelphia Society for Promoting Agriculture, in the summer of 1789, WILLIAM BARTRAM particularly and scientifically described the curculio; and adds "Many methods have been thought of and practiced to remedy the evil, but none have as yet been attended with success."

"During my travels southward (from Pennsylvania to Florida) I had sufficient opportunities to observe that the fruit trees on the sea coast and brackish water, were free from the ravages of this destructive insect; this suggested to me an idea that the saline vapors were pernicious to them, and hence I imagined that if we were to go to the trifling expense of showering our choicest fruit trees with a weak solution of common sea salt, once or twice a week, it might answer the same end of preserving the fruit. But this is only a conjecture, having never made the experiment."

In 1808, W. Bartram furnished the following:

"The spring following, I put the experiment of showering a plum tree on trial, with a weak solution of sea salt dissolved in water; but being too strong of salt, most of the leaves and fruit fell off in consequence of it, otherwise the experiment might have produced the desired effect, as what fruit remained were not touched by the insect, though small and disfigured by the strength of the brine; yet a few arrived to their natural size and ripened, so that I am induced to believe that with care in tempering the solution, it will be found to be the best and cheapest remedy against the ravages and increase of those pernicious insects yet discovered. It should be so weak as just to taste of salt."

Dr. TILTON, who wrote about the beginning of this century, says—"There is no surer protection against the Curculio than a pavement." This however is only applicable to a few trees."

It was believed both by William Bartram and Dr. Tilton that the Curculio infested the pear and apple, as well as stone fruit; and that it continued its work through the summer into autumn. It appears however that this notion is unfounded. In 1831, the late Judge Darling of New Haven, Ct., stated in the New-York Farmer, that this insect ceased from its labors early in the 7th month; and that the worm which infests the apple becomes a moth or miller. On reading this statement, I repeated his experiment without delay, by putting these worms with a part of the apple, among moist earth in a tumbler, and covered it with a piece of window glass. In due time, the perfect insect came forth, very different indeed from the Curculio, and fully confirming Judge Darling's statement. D. THOMAS. *Greatfield, Cayuga co., 6 mo. 29, 1850.*

Notes on New Cherries.

BOYER'S EARLY HEART.—This has been supposed by some to be identical with the Early White Heart. But from careful and repeated examination the present year, there are evidently several points of difference. Boyer's Early Heart is earlier, but it may not prove always so; it is larger, superior in flavor, and its stone is smaller.

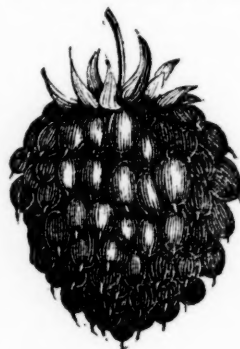
SWEEDISH.—This variety, from Dr. Kirtland of Cleveland, has fruited for several successive years. It is regarded by F. R. Elliott (in the Proceedings of the Syracuse Fruit Convention,) as identical with the Early White Heart. There is evidently a great similarity in flavor, and the period of ripening is about the same; but the strikingly rugose or wrinkled surface of the Sweedish, distinguishes it from all other sorts of its season.

The EARLY PURPLE GUIGNE, so far, maintains its position as the best of the earliest cherries. It ripens with the May Bigarreau, two weeks earlier than the Black Tartarian. It is about the size of the Black Heart, or one half larger than the May Bigarreau, and is far superior to the latter in flavor.

DR. KIRTLAND'S NEW SEEDLING.—Several of these have borne in Western New-York, and most of them maintain the high character given to them by F. R. Elliott of Cleveland, who introduced them. After another year's trial, we may safely speak of them more particularly.

Red Antwerp Raspberry.

This variety of the Raspberry, (the genuine, large fruited,) in common with most other sorts, succeeds to perfection on strong, deep, and rich soils. On light gravelly or sandy soils, we have rarely obtained good crops.



Red Antwerp.

Under the most favorable circumstances, it becomes a profuse bearer. It has been cultivated with great success at Milton, in Ulster county, N. Y. S. A. Barratt, of that place, made the following statement before the American Pomological Congress, which was corroborated by others present:—

"In productiveness, it was unsurpassed by any. It bore long in succession, and in ordinary seasons could be gathered for five weeks. As a market fruit, it was better than any other variety, bearing carriage very well, and not being exceeded by any in flavor. It sold in New-York for about twenty-two cents a quart, and from three-quarters of an acre he had realised \$330, at an average of ten cents per basket. There was a cultivator in his neighborhood who obtained \$1500 worth from three acres, and that, in a very unfavorable season of only three weeks instead of five. To insure a crop, it required to be protected during the winter by drawing down the ends, and covering them with earth. About three acres would afford as many raspberries as could well be cared for. He had known the ends to live in severe winters, although uncovered, but that was in very favorable situations."

Strawberries.

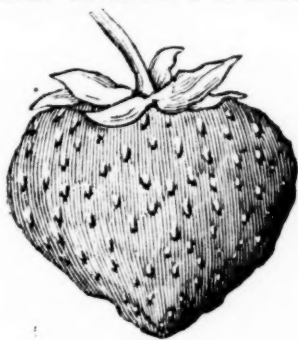
In answer to an inquiry, "Can strawberries be profitably set out after the present period of the year, and what are the best varieties for market as well as home use," we may briefly state that the spring of the year is decidedly the best time for transplanting, and next, soon after midsummer, or about the time that the second growth commences, when the crop has been gathered. Strict care must, however, be taken at the latter period, to prevent perishing by drouth. Watering, merely, will not answer. The best way is to immerse the roots in thick mud, set them out, water them freely to settle the earth compactly, and then to cover the soil about them two or three inches thick with old manure. This keeps the soil open and moist. A free watering once or twice afterwards upon this manure, as the soil on examination appears to need it, will benefit the plants, and not harden or crack the surface. This method has succeeded perfectly in the driest part of midsummer without the loss of a single plant. Strawberries set

out after the first of autumn, are liable to be thrown out by winter frost.

South and west, the best variety perhaps, for market, is the Cincinnati Hudson. It flourishes and bears profusely with very moderate care. In N. England it does not flourish quite so well. Hovey's Seedling makes the finest show after it has been picked, but is not sufficiently productive under ordinary treatment. The sort most generally preferred for its delicious quality, and not even excepting Swainstone's Seedling, is Burr's New Pine. It is rather large, quite productive, but too delicate in texture to carry to market. The Large Early Searlet is the best very early sort, and the Dundee a fine late variety. Boston Pine if kept in hills, is large, fine in quality, and very productive. Black Prince is a fine, mild flavored sort, large and tolerably productive.

Disagreement of Doctors.

There are some fruits whose qualities meet with almost universal approval, while there are others about which there is a most singular diversity of opinion.



Black Prince.

One of the most striking instances of the latter, is furnished by the discussions on the *Black Prince* strawberry, as reported in the Proceedings of the Second Congress of Fruit Growers:

"Mr. Saul proposed to add to the list of strawberries the *Black Prince*. He had known it for ten years, and esteemed it the highest flavored of all. It was a very good bearer, remarkably hardy and endured the winter much better than most other varieties. It had as many desirable qualities as any he knew of.

"Mr. Downing had great pleasure in bearing testimony to the good qualities of this strawberry. He preferred its flavor to that of any other variety. It was, as Mr. Saul had said, a hardy and an excellent bearer, and the berries were large and handsome. He could safely recommend it.

"Mr. Lines had procured it on Mr. Downing's recommendation, and, like him, had found it an abundant bearer, with a handsome berry; but it was the most insipid fruit he ever tasted. He was surprised that so handsome a berry should be so tasteless. The fruit would hardly bear gathering, it melted so easily in the fingers.

"Col. Hodge had fruited it for three or four years. Its flavor was not so good and the crop not so abundant with him as other gentlemen seemed to have found them.

"Mr. Hamilton said that with him it was one of the very best, and certainly had the highest flavor of any.

"Mr. Manice had it from Mr. Downing, and found it the poorest strawberry he had ever cultivated.

"Mr. Miller considered it at the head of all in point of flavor.

"Mr. Battey, of Keeseville, N. Y., had been much disappointed in the quality of this fruit. It was worthless, dry and insipid, and with him the plant was a poor bearer.

"Mr. S. B. Parsons last year thought it first rate, but this year it was poor with him.

"Mr. Barry said it was a beautiful colored berry, and one of the highest flavor, but it was a small bearer. For amateurs it was an indispensable variety, but it would not do as a market fruit.

"Mr. C. Downing regarded it as the highest flavored strawberry he ever tasted, and one of the best varieties. He grew it on a light, sandy loam.

Mr. Hancock had tried it four or five years, but it had never succeeded with him."

The truth appears to be that this variety is liable to be more affected by soil and treatment than many other sorts; and the flavor, being very mild, and the fruit exceedingly delicate, unless these qualities are well developed, the fruit becomes by a single step, at once insipid. Besides this, many persons greatly prefer a rich acid to a mild delicate fruit, and hence under any circumstances, would not admire the *Black Prince*.

Unfavorable Localities of Fruits.

S. W. COLE, of the *N. E. Farmer*, makes the following objections to a part of the select list of fruits adopted by the American Pomological Congress, so far as they have been tried in parts of New England.

Early Harvest—Slow grower, poor bearer, fruit liable to crack and blast.

American Summer Pearmain—Very liable to blast.

Early Strawberry—Too small for market—sometimes affected with blight.

Fall Pippin—Very liable to blast—far less profitable than some others.

Fameuse—Does not succeed well in warm locations—not of high quality—beauty its greatest excellence.

Winesap—Too small for market—better for cider and cooking than for the table.

Lady Apple—Very small, very beautiful, tolerably good, often imperfect.

Wine Apple of Cox—Tolerably good, but others better for the same season.

Vandevere—Hardly known in New-England—believed to be liable to blast and bitter rot.

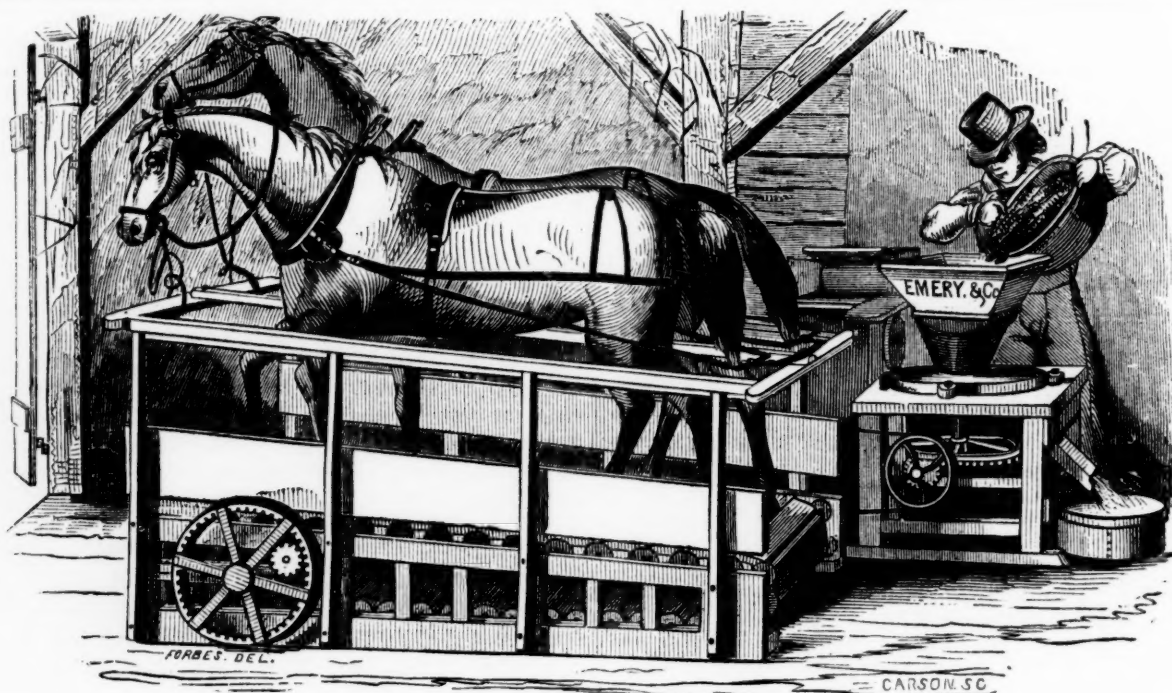
Swaar—Fine in New-York, but in N. England light and corky at core.

St. Ghislain Pear.

The editor of the *N. E. Farmer*, states that the "finest looking" fruit he ever saw of this variety, was grown on a stock of English White thorn, and trained on a building. This pear, usually quite small, was thus grown large enough to sell well in market. It is well known to be a sort greatly affected in size and quality by the culture it gets, and this mode of doubling its magnitude is doubtless worthy of trial.

Peeling the bark of the Cherry.

GEORGE JAKES, of Worcester, Mass., in a letter dated June 10, 1850, gives the following results of experiments on cherry trees. "Some experiments in peeling the outer bark of the cherry have succeeded with me admirably. The change from smooth bark to rough bark, is a crisis in the life of a tree seemingly almost as perilous as that through which some of the animated creation are compelled to pass—in their change from youth to adult age. This disbarking process suits the wants of the cherry, and also of the pear, so far as I have extended my experiments; but I am not yet prepared to speak positively, till further experiments are matured."



NEW RAILROAD HORSE POWER AND FEED MILL.

THE above cut represents a new Horse Power, recently brought into notice by Messrs. EMERY & Co., of the Albany Agricultural Works. It is on the general plan of the approved endless chain powers sold by them for several years past. The principal difference is in the manner of obtaining and applying the power and motion from the revolving platform to the shaft of the driving pulley.

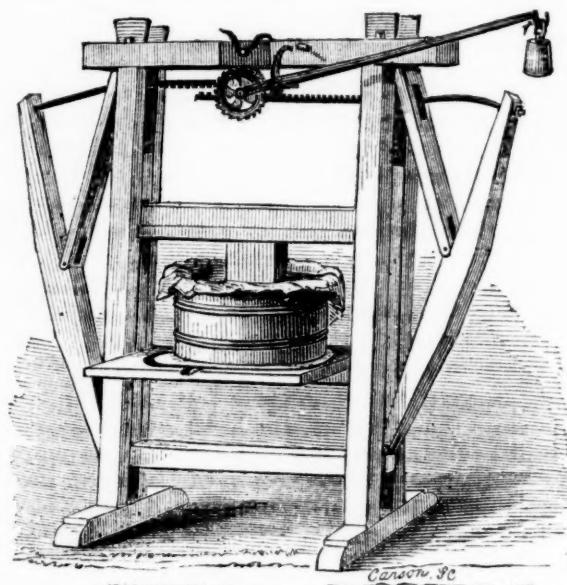
This Power, as will be readily seen in the cut, has the revolving plank platform, traversing upon its own friction wheels and iron Railroad Track. At the forward end, this platform is supported by its small shafts upon an iron reel, about sixteen inches in diameter—the shaft of this reel extending beyond the sides of the frame work sufficiently to receive a strong converge or internal gear, about twenty-four inches in diameter, as seen in the cut.

The shaft of the driving pulley, (which pulley is three feet in diameter,) is hung in like manner, with the small gear upon one end, operating inside the converge gear before described, and consequently receives an increased motion in the same direction, and carries the driving pulley on the opposite side of the power for driving the Overshot Thresher, without crossing of bands or intermediate gearing. The converge wheel is so arranged as to work on either side of the power, as may be desirable.

This arrangement entirely removes all liability of breakage and wear of links and pinions (heretofore unavoidable,) as the direct stress upon the links working over small pinions is wholly avoided; and they are acknowledged by those using them to run with lighter friction, which it is said enables the power to be operated at a less elevation than by the former mode. The arrangement for tightening the endless platform by means of a joint bolt connecting with the bearings of the reel shaft, is new, and is a very simple and effectual mode of effecting this object, as it may be instantly done by a common wrench without stopping the machine. The platform is considerably longer than usual, avoiding the liability of large or unsteady horses stepping over or off at either end.

The above cut also represents a valuable mill, capable of being driven with this power to good ad-

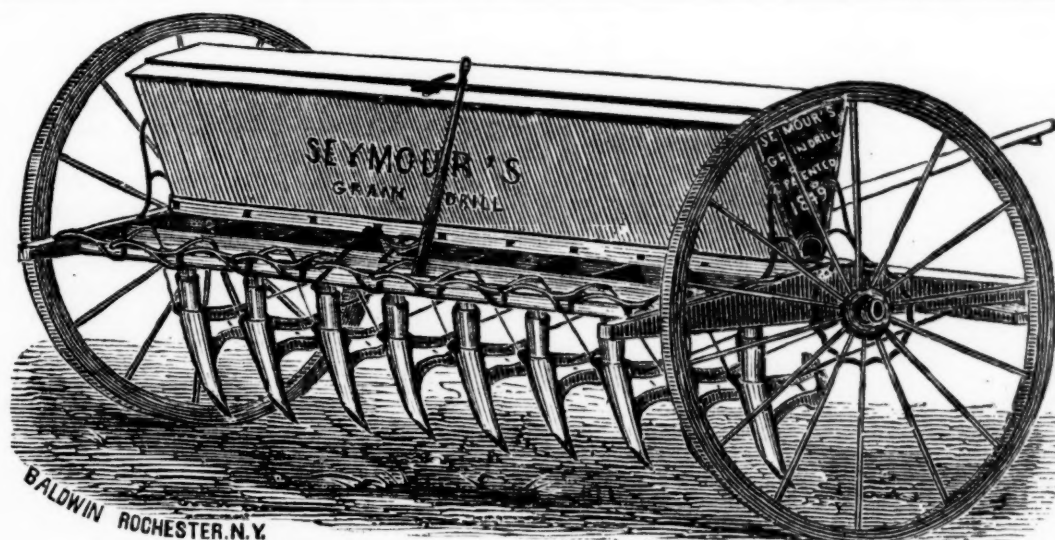
vantage, for grinding food for stock. A considerable number have been sold for several years past, and answer a good purpose. They are cheap, costing but \$35, with one extra set of grinding plates, —(new plates costing \$2 per set.) and are capable of grinding 600 to 800 bushels per sett, according to the fineness to which it is ground. These are also made and sold by EMERY & Co.



Kendall's Cheese-Press.

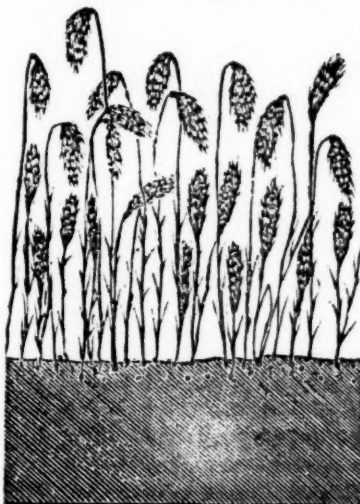
Patented July 15, 1843.

The above cut represents an approved cheese press for which the New-York State Ag. Society awarded the first premium in 1848, and is, we learn, generally used in the counties of Herkimer, Oneida, &c., in this state. Its construction is a combination of levers working together, and so arranged as to give any desired amount of pressure. A suspended weight of twenty pounds, being sufficient to give a pressure of ten tons. They can be had of EMERY & Co., of the Albany Agricultural Warehouse. Price \$15.



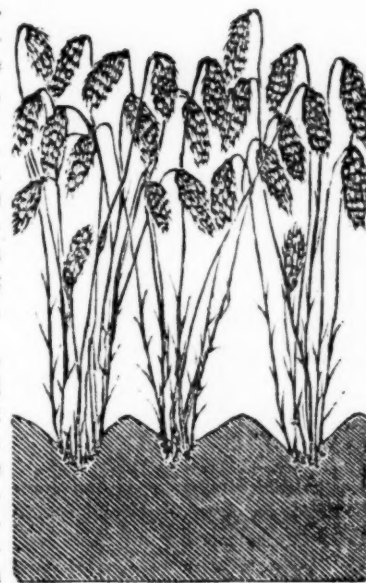
SEYMOUR'S GRAIN DRILL.

THIS machine is manufactured by P. SEYMOUR, of East Bloomfield, Ontario county, N. Y. It received a premium at the State Fair at Syracuse, as the best grain drill capable of depositing fine manures with the seed. It sows wheat, oats, barley, corn, beans, peas, &c., and is also capable of sowing with the seed plaster, lime and ashes. It can be changed in a few minutes from a drill to a broadcast sower. We have heard this machine recommended by persons who have used it. The price, with nine teeth, is \$80; with seven teeth, \$70; garden drill \$50. For further particulars, see advertisement.

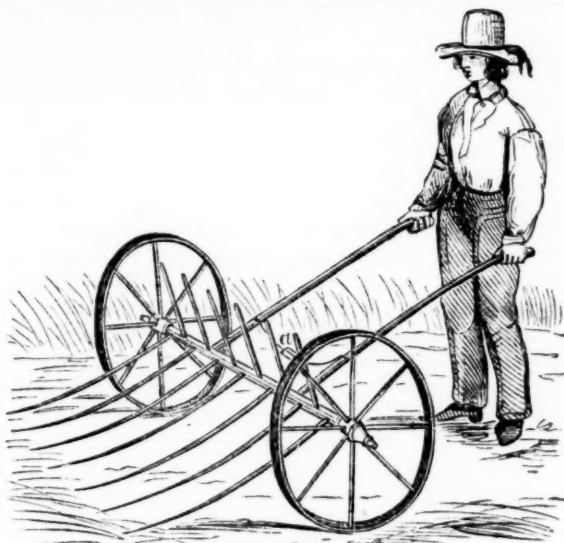


Wheat sown Broadcast.

The accompanying cuts represent the appearance of wheat sown both by the drill and broadcast, at the time of ripening. It will be noticed that the height of that sown broadcast is very uneven, while the upright position of many of the heads, indicates that they are light, not being well filled. We have before expressed the opinion that the introduction of the drill system would be an important desideratum.



Wheat sown with a Drill.



Grain Binders' Wheel Rake.

The above cut represents a labor and time saving implement, used extensively in several states where it has been introduced. It is light, weighing about fifteen pounds. As represented in the engraving, the binder takes the handles and pushes it before

him, with the points of the teeth or fingers close upon the ground, and when he has gathered on the fingers a sufficient quantity for binding into a sheaf, he places his foot upon the foot piece, (a.) and by a slight pressure, and by letting go the handles, the fingers and grain are raised above the stubble, when it is readily bound, the binder being required to stoop much less than in the old way of reaching to the ground. When the sheaf is bound and thrown aside, the foot is removed from the foot-piece, (a.) the teeth drop down, and the handles rise ready for the next operation. The wheels are about eighteen inches high, and it is easily pushed before the binder. The width between the wheels is sufficient for the longest grain. It is for sale at Emery & Co.'s Warehouse. Price from 3 to 4 dollars.

NUMBER OF GRAINS IN A BUSHEL OF WHEAT.—A writer in the *North British Agriculturist* states that the number of grains in a bushel of wheat weighing 62 lbs. is upwards of 630,000.

SOWING WHEAT IN DRILLS.—A Scotch farmer estimates the increase of crop from sowing wheat in drills, instead of broad-cast, at an average of one-fourth to one-third.

☞ He who falls in love with himself will find no rivals.

New-York State Agricultural Society.

New-York State Fair.

The grounds belonging to the Bull's Head tavern, on the Albany and Troy road, have been selected for the next fair. The necessary fixtures and arrangements, which are on a convenient and extensive scale, will be completed in due season, and we have every reason to anticipate an exhibition which will in all respects vie with any previously made by the society. It will commence on Tuesday the 3d of September, and close on Friday the 6th. All exhibitors are required to have their articles or animals entered on the Secretary's books, on or before the first day mentioned, and all articles and animals, except horses, must be brought within the enclosure as early as 12 o'clock on that day. Hay, litter and water for stock will be furnished on the ground without charge. Exhibitors must become members of the society, for which a fee of one dollar will be required. The *second day* will be devoted to examinations by the awarding committees, but the grounds will not be opened, except to members of the society, till the *third day*, September 5th, at which time tickets admitting one person will be sold at the Treasurer's office, on the grounds, at 12½ cts. each.

Particulars in regard to all the regulations, may be learned from the pamphlets comprising the premium list, &c., which may be had gratis on application to the Secretary, B. P. JOHNSON, Esq. Albany.

Liberal premiums are offered for horses, cattle and sheep from without the state, and the premiums for agricultural implements, machinery, experiments, essays, &c., are open to unlimited competition.

The annual address will be delivered under the Society's tent on the grounds on Friday afternoon. Evening meetings will be held during the fair, for the discussion of agricultural subjects.

At the meeting of the Executive Committee, July 11th, it was on motion of Judge VAN BERGEN, *Resolved*, That an invitation be extended to the Members of Congress, to attend the Fair of the Society to be held in Sept. next.

On motion of Mr. TUCKER,

Resolved, That hereafter, the name of the person entering stock or articles for exhibition, as well as the No. of the entry, be inserted on the cards to be placed upon the animals or articles offered for competition

The following correspondence between the President of the Society, and the late President of the United States, was read. At the time these letters were written, hopes were entertained that our late Chief Magistrate would be present at the coming exhibition; but these hopes have been destroyed by the afflictive dispensation which has clad the nation in mourning.

MOUNT HOPE, ALBANY, May 18, 1850.

His Excellency, Z. TAYLOR, President U. S.

SIR—The New-York State Agricultural Society was greatly disappointed that the state of your Excellency's health did not allow you to become its guest at Syracuse last autumn. The Society and Farmers of New-York, however, flattering themselves that their disappointment was attributable only to temporary indisposition, had hoped that the welcome they had prepared for their Chief Magistrate was only postponed—not lost.

Acting as their organ, as the presiding officer of the State Society, and in accordance with an unanimous vote passed at the last meeting of its Ex. Board, I have now the honor of repeating the invitation for their show, to be held during the first week in September next.

You sir, have taken too deep an interest in the great objects to which the Society is devoted, to make it necessary for me to say more than to assure your Excellency, that no part of this great Republic could give you a more cordial reception, than will await you at this Great Farmer's Festival.

I am, sir, with great respect, &c.

E. P. PRENTICE, *Pres't. St. Ag. Soc.*

WASHINGTON, July 5, 1850.

E. P. PRENTICE, Esq. Albany, N. Y.:

SIR:—I have duly received your favors of May 18th and June 25th, the former wishing me to attend the Annual Fair of the N. Y. State Agricultural Society in September next, the latter kindly asking my company at your house on that occasion.

In the extreme uncertainty attending the adjournment of Congress, until which event I cannot leave the seat of Government, I find it quite impossible to give any assurances in regard to my presence at the State Fair. I was greatly disappointed when circumstances prevented my attendance at the Fair of last year, and it is my hope this season to have the gratification of witnessing a similar exhibition. Unless prevented by an extraordinary prolongation of the session of Congress, or by other circumstances, not now foreseen, I shall certainly comply with the invitation which you have extended me, as President of the Agricultural Society.

I fear, however, that I shall be obliged to decline your very kind request, that I should make your house my home during my attendance at the Fair. It will hardly be in my power to accept any private invitations, but should I do so, that of Gov. FISH, which I some time since received, would have the strongest claim upon my attention.

With many thanks for your hospitable offer, I remain, very truly, yours. Z. TAYLOR.

Subsequently to the receipt of the above letter from Gen. TAYLOR, the melancholy tidings of his death, have been announced, and in reference to this event, the Executive Committee adopted the following resolutions:

Resolved, That we have heard with sincere regret of the decease of his Excellency, Zachary Taylor, President of the United States, and that we participate with our fellow citizens in the grief which is felt at the sudden loss of one who was distinguished in the various stations to which he had been called by a firm self-sacrificing devotion to the interests of his country, and whose attachment to the cause of agriculture is so warmly expressed in the foregoing letter, the last we understand, he ever wrote.

Resolved, That, on behalf of the society we represent, we tender to his afflicted family, our most heartfelt sympathies at this melancholy bereavement, trusting that He who has afflicted, will sustain and support them under this most severe trial.

Resolved, That a copy of the above proceedings, signed by the President and Secretary, be forwarded to the widow and family of President Taylor.

MUSICAL EXHIBITION DURING THE FAIR.—We learn that the Harmonia Society of this city propose to perform, during several days of the State Fair, HAYDN's celebrated 'Oratorio of the Seasons.' The best musical talent in the country has already been engaged for the occasion.

The Farmer's Note-Book.

Seed Wheat that will not "turn to Chess."

EDS. CULTIVATOR—As the time for sowing wheat is at hand, and *perfectly clean seed* is admitted by all to be very desirable, I deem it seasonable to state some facts and observations, and on them to predicate some advice for the attainment of that desideratum. I must premise, however, that early in life I embraced as a Scriptural truth, the notion that "what a man soweth that shall he also reap." My father was an old-fashioned orthodox farmer, who believed and taught that this parable was based on an ordinance of Heaven, and was a *real fact*, and literally true with respect to grain, and his works were in accordance with *his* faith. He therefore took uncommon pains to obtain pure seed. In consequence, he was never troubled with chess, while his neighbors who believed that "wheat will turn to chess," and therefore "it is of no use of being so particular," about the seed, acted in accordance with *their* faith, and were, (unavoidably, as they supposed,) much annoyed with chess.

In the fall of 1841, I was compelled to plow a field of oat stubble that had been seeded down, but had failed in consequence of severe drouth. I sowed it with rye, except about an acre near the barn, which I concluded to try wheat. I was told a neighbor was threshing all his wheat for seed, on account of its being perfectly clean. Two bushels of it was obtained at a price much above the market, on account of its being, (as he, in all sincerity expressed it,) "*perfectly clean—nothing but wheat.*" On examination, however, smut, cockle, and chess were discovered to such an amount as to warrant an attempt at purification before sowing. Over five quarts of smut, cockle and chess was first picked and sifted out; a large wash tub full of strong brine was then made, and the wheat, (about a peck at a time,) stirred in, which brought to the surface the rest of the smut and chess, which were skimmed off; but a few grains of cockle and rye remained inseparable in the wheat. The wheat was then scooped out on a floor to drain off, and about a peck of slacked lime mixed with it, by repeatedly scooping it over, so as to coat the surface of the grains with the lime. I omitted to state that on measuring the wheat *after* the purifying process, it had lost by that operation, in *smut, chess, cockle, shrunk wheat*, and other extraneous matters, nearly a peck, or one-eighth, a fair sample, I presume, of most of the "clean wheat" that is sowed and turns to chess.

It was sowed on the 8th of September, and with favorable weather attained such a growth that I turned several calves on it to eat it down. An old friend, a farmer of great experience, visited me at the time the calves were on it, and gave a lecture on "wheat turning to chess," declaring that there was nothing so certain to produce that result, as calves feeding on it; "never knew it to fail," and seeing my apparent indifference to his admonitions, he expressed, with much sympathy, his regret for the loss he was sure I would sustain, as the penalty for my rashness in having such a "beautiful piece of wheat all turned into chess."

The wheat wintered well, excepting a patch near the barn, from which the snow had been drifted, and where it had been fed down by the fowls so close that nothing was to be seen of it, but with warm weather, it too became green, but it was doubtful whether it was wheat or grass. When the wheat

headed out, it looked so promising that I had the vanity to think of competition at the County Fair. To this end I requested a surveyor, who is also one of our best farmers, to call and measure the ground. He observed the part fed off by the fowls, had not yet headed out, and inquired into the cause, and when told, he too remarked, "*it will probably be all chess,*" and proposed to leave it out of the measurement on that account. Here was another *almost certain* cause of transmutation, and moreover another—the alternate freezing and thawing during its exposure through the winter and spring. At last the heads appeared, and although thrice doomed to be chess, it turned out to be all wheat, but too late to mature the grain. The crop was harvested while the grain was soft. The yield was about 28 bushels, weighing 62½ lbs. to the bushel—and took the first premium at the Rensselaer County Fair in 1842. The rye and cockle were pulled before ripening, and it was so free from chess and smut that the whole was sold for seed at 25 cents above the market price—except six bushels which I sowed myself, and the product of which was about 35 bushels to the acre, equally good and clean, and took the second premium in 1843. The whole of this, too, was sold for seed at 18½ cents above the market price, and warranted not to "*turn to chess*" if sown on clean land, and I never heard any complaint of its doing so.

Another neighbor who had a naked fallow in 1841, on virgin soil, prepared with uncommon care, having dug out all the stumps at great expense, also sowed 12 bushels of the "perfectly clean, nothing but wheat" seed, without any preparation, and although it grew very stout and ripened well, it was so foul as to be scarcely merchantable.

It is also a fact of very general observation, that in this region wheat grown for a succession of years on the same soil diminishes in product and becomes more foul, or as it is usually expressed, becomes more and more liable to "turn to chess." The rationale is this; the soil becomes after every wheat crop less genial to the growth of the same grain, and in proportion as it does so, it favours the growth of chess—so that the latter will, in a succession of years, supplant the wheat.

From the foregoing facts and observations, the conclusion is,

1st—That what is *generally* called perfectly clean seed, does, in fact, contain chess and other foul seed.

2nd—That any condition of the soil or season which is unfavorable to the wheat crop, favours the growth and productiveness of chess, and therefore it supplants the wheat.

3d—That in proportion as the soil contains the elements which constitute a "wheat soil," and it is free from chess and other foul seed, as well as the wheat that is sown, in that same proportion will the crop be free from chess and other foul seeds.

4th—That *perfectly clean seed* is a desideratum, to be obtained *only* by the following method:

Glean a wheat field by hand, picking up each ear separately. Thresh the gleanings upon a floor where no other grain is threshed, or still better rub them out by hand; sow the grain on a clean fallow or clean sod, without manure, unless it be lime or ashes, and the product will be *pure wheat*. If this process is thought to be "too particular," the *sifting, picking, brining and liming* process above described may be substituted with considerable hope of success, if it be faithfully executed. But the gleaning is the most certain; a man or a boy will easily glean a peck in half a day, which if sown on

good wheat soil will produce 5 bushels, which again sown will, two years hence, produce 100 bushels; a quantity sufficient to sow 50 acres; and no farmer having a good wheat soil and 100 bushels perfectly clean wheat, could be in better business than to propagate it exclusively for seed. All that is essential to success, is to sow clean seed on a clean wheat soil. The preparation of the soil is generally well understood in the wheat-growing districts of our country, but it may perhaps not be known or not thought to be necessary, that to keep wheat intended for seed free from all foreign admixture, a separate barn and granary should be appropriated exclusively to its reception, in which it should be threshed with the flail and stored till sold.

For the encouragement of such an enterprise I will state the results of my experience in dollars and cents.

Sifting, picking, brining and liming 2 bush. wheat, $\frac{1}{2}$ day at 8s.	50
Salt and lime, say	10
	60
Extra price of 28 bushels wheat, at 2s. per bushel	\$7.00
Deduct	60
	6.40

For half a days work merely in the improvement of the quality of the grain, aside from the probable increase in quantity, to say nothing of the premium of \$6. But this is not all. From the six bushels of this crop sown in 1842, 92 bushels equally good was produced and sold for seed at an advance of 18 $\frac{3}{4}$ cents per bushel, at wholesale, to a seedsman.

Thus 92 bushels at 1s6d. per bushel is	\$17.25
No sifting or picking being necessary, but only brining and liming, $\frac{1}{2}$ day	25
Salt and Lime say	25
	50

Leaving a balance of \$16.75, in favor of improved quality to say nothing of increased quantity and premium. I will add that the wheat was the bearded, red chaff, and that of several kinds that I have grown, I give it the preference. A. D. S. Troy, July 16th, 1850.

Mr. Sheafe's Sale of Short-Horns.

This will positively take place at New Hamburg, on Thursday, the 29th day of August, as advertised at page 288. The stock will be arranged according to their number in the Catalogue the day before the sale, and on sales day. Thus every one will be able to examine them to entire satisfaction. When the sale commences an ample ring will be staked out and roped. Into this circle each animal will be brought when it is put up for sale, and walked around for inspection. As all persons will be kept outside of the ropes, this again will give every one present an opportunity of close examination. If there be any unsoundness or vice in any animal on sales day, the public will be informed of it. It is my intention that every thing be conducted in the most honorable manner; and in doing this, I am happy to add, I shall only be carrying out the express wishes of the owner of the herd.

New Hamburg is on the east side of the Hudson river, eight miles above Newburg, and about the same distance below Poughkeepsie. It can be reached by rail road from opposite the former place, or directly from the latter in fifteen minutes. It is only two to three hours distant from New York by rail road, and four to five hours from Albany by steamboat and rail road. Several trips per day are made to each place, at the low rates of eighty-five cents, to one dollar.

CONDITIONS.—In order to save time in bidding, and ensure despatch, the cows and heifers will be put up

at a price varying from \$25 to \$100 each, dependent upon the animal. If bid off at the price named when put up, or any thing above, it will then be the property of the person bidding, otherwise it will be considered still the property of Mr. Sheafe. The bull calves will be put up at \$25 each, and Exeter at \$300. The sheep and lambs will be put up at \$5, \$6, and \$7 per head, as above. The swine at \$5 to \$10 per head, according to age. The working oxen at \$100.

After an animal is bid off, it will then be considered at the risk of the owner; but it can remain on the farm free of expense, one week.

TERMS.—For all sums amounting to one hundred dollars and upwards, approved endorsed notes will be taken at six months, or a discount of five per cent. for cash.

Catalogues with full description and pedigree of each animal, can be had on application to A. B. ALLEN, 189 Water street, New York.

Repairing Sythe-Snaths.

EDS. CULTIVATOR—In preparing for haying I was reminded of what I intended to do some time ago—and if this is published in your August number it may not be too late to benefit some of your numerous subscribers.

I refer to repairing sythe-snaths in a way which I have practiced for many years. When the craw-hole (socket to receive the sythe) fails, which is very common, I flat the end of the snath about six inches from the end, and get a blacksmith to fit an iron to it about one-eighth of an inch thick, with a hole punched in it suitable for the craw of the sythe, which plate is firmly secured or riveted on, so as not to alter the hanging of the sythe, which makes the snath far more durable than when new. I find on examining my snaths, that I have none but what have been repaired in this way, and that I have saved the expense of buying any for several years. DANIEL S. CURTIS. Canaan Centre, July 11th, 1850.

Mode of Unloading Hay.

EDS. CULTIVATOR—I send you an account of the manner in which I unload my hay, thinking that a slight description might be of benefit to some of your numerous readers; as it saves nearly all the expense and fatigue of pitching off in the usual way, and the apparatus costs only fifteen dollars—a sum which is more than saved in unloading forty tons of hay.

The improvement over the old method consists in removing one half of the load at a time, in one entire body, from the wagon to the mow, by means of a windlass; thereby saving all the labor and exertion which is at present spent in separating the forkfulls from the load. On commencing the load a net, or piece of net-work, made of small rope and resembling in appearance the cording of a bedstead, is spread over the bottom of the wagon, it being of sufficient size to cover it; the hay is then pitched on above this, until the load is about half on, when another net, similar to the first, is spread over the top of it, and the load completed. On arriving at the barn, a rope which passes through a pulley, fastened to the ridge directly over the mow and from thence to the windlass, is hitched by means of a slight tackle, to the outer edges of the uppermost net, when, by means of the windlass, the man that came to the barn with the load can elevate that half of it above this net over the beam, and drop it into the mow, in the short space of two minutes; when the remaining half is elevated in the same manner. By lowering the hay down after it has passed over the beam, it

can be swung to any part of the mow, and there dropped, thus saving entirely the mowing away. The apparatus, windlass, &c., can be removed from one barn to another in a few moments, and thus be made to answer for any number of barns desired. Farmers wishing to build or buy the apparatus, can obtain it, or drawings representing it, by applying to me at Rochester, N. Y. J. A. H. ELLIS. Rochester, May 6th, 1850.

Preparing Land for a Crop.

A farmer has a field of clayey loam, which requires a weeks work at least to prepare it for corn, oats, or barley. Now how ought he to proceed?

It is not uncommon to see such lots turned over, and the furrow-slice left day after day, to dry and bake in the sun, without the least attention till the plowing of the whole field is completed.

Well, what better could he do?

Reduce what he has plowed to a fine tilth while it is moist and easily crumbles,—not leaving it to lie one day before he puts on the harrow or the drag-roller. A small share of labor at this time will do twice as much to pulverize the soil, as when it has hardened like an unburnt brick.

What! stop the plow before finishing the field! Farmers that drive a-head don't do so.

That is, they drive one day a-head, and leave their work two days behind. But let me ask what is the use of plowing land?

The use? why to put the ground in order—you could not expect a crop without it.

Neither ought we to expect more than half a crop when it is only half pulverized. If we plow 8 inches deep, and one half of this soil is in hard clods, how much better is it than to plow 4 inches deep, and have it thoroughly pulverized? How much better is a *clod* on the field than a *stone*? AN OLD FARMER.

Experiments in Dissolving Bones.

EDS. CULTIVATOR—After reading Prof. Norton's interesting letter on the value of bones as a manure, I procured a load of bones (mostly the skulls of sheep) from a slaughter-house, and commenced the operation as detailed below.

Having procured a large flat granite rock, I placed it beside the pile of bones. I crushed 130 lbs. of them with a sledge hammer, and put them in a large barrel, pounding them down as they were put in. A carboy of sulphuric acid was then obtained from a druggist in Boston. The bill for the same ran thus:

1 Carboy oil of vitriol, 125 lbs.,.....	\$3 75
Carting,.....	25
Carboy,.....	1 50
Freight,.....	67
	\$6 17

This acid did not run *thick*, as Prof. Norton said, but rather thin. It would not burn *wood* nor *char bones*, but it would burn straw. This leads me to suspect that it had been diluted with water.

I took an old pail which held 10 quarts up to a certain mark. I poured into the pail five qts. of water and an equal quantity of acid, which ought to weigh 20 lbs., if good. Five qts. more of cold water was now added, and in about three hours the liquid was turned into the pail, and then turned on the bones again. This was repeated frequently on the two succeeding days, adding as much more acid and water on each day.

I practiced turning off the liquid and pouring it on the bones as a substitute for stirring, as that was impossible in this case. I cannot see how *crushed*

bones can be *stirred* and *turned over* in a barrel or hoghead. I hope some of your correspondents will enlighten us on this point. This experiment commenced on the 16th of May, and I expected to have the bones fit for use by the 21st, but they were not wholly dissolved till the 1st of June, so that I cannot use any of them on my corn without it is put on top of the ground.

I have just dissolved 90 lbs. more of bones in the same barrel, in about ten days, with about 11 qts. of acid, using *boiling* water, and proportionally a less quantity than before. The first barrel did not dissolve very rapidly, till the weather grew warm, near the first of June.

My object in writing this article, is to elicit remarks from those who have had practical experience in this method of manufacturing manure. I wish to know what to do with these bones? Will it be profitable to sow them on the ground this fall, with fall rye, where the ground is to be stocked down? What test have we to ascertain the quality of sulphuric acid? Will dissolved bones pay for this expense, in Vermont? I have 2000 lbs. of large bones. Will it be profitable for me to *burn* them for use? WARREN HUTCHINS. Bethel, Vt., July 1, 1850.

Wisconsin as a Farming Section.

EDS. CULTIVATOR—Noticing in a back number, a request that some one from Wisconsin would give you an article on the usual method of farming in this state, and the best sections of it for that business, I herewith submit a brief account derived from six years residence in the state.

First, as regards the best section of the state for farming. This is a hard question to decide, where all is good, and where it is claimed that each section is best. But, from a pretty extensive acquaintance with the whole state, I think the counties of Fond du Lac, Winnebago, Marquette, and Dodge, possess greater advantages for successful and profitable farming than any others. These counties are agreeably diversified with prairies, oak openings, and timber land. They are generally well watered with springs, and spring-brooks, while larger streams afford a greater quantity of water-power than is often met with in the west or even at the east. The natural meadows, or low prairies afford a sufficient quantity of good hay to supply the wants of the inhabitants. The Fox river, and lake Winnebago afford a good natural communication with the east. They have running on them steam and other boats connecting with the boats running to Buffalo.

For grazing, the country is admirably adapted; and sweeter or better butter cannot be made in any other part of the United States than is here made. Having formerly lived in Orange County, N. Y., I speak advisedly on this subject.

Sheep do well, and from the pure bracing air, can be kept in larger flocks than usual; while from the boundless pasturage that lies common, there is no necessity for close stocking.

In wheat raising, the great staple, the country is not surpassed, perhaps, in the world. Here, fields yield this crop year after year, and with most slovenly cultivation.

Secondly, as to the course of cultivation pursued on the prairies and openings. The land is enclosed with a rail, board or ditch fence. It is then broken up with from two to six yoke of cattle. The width of the furrow turned over varies from 12 to 30 inches, and is from 1½ to three inches thick. The larger the team is, the more economical, as a heavy team will break so much more with the same force of men, as to more than pay for the difference in the number of oxen. The

price of breaking is from \$1.75 to \$2 an acre. The season for breaking is from the 10th of May till the 10th of July. It is not advisable to break earlier or later than these periods. If it is done, the sod is a very long time in rotting and does not produce so well. Corn is sometimes planted on the sod—planted when the breaking is being done, at the edges of the furrows. No after culture is given until the corn is cut up at harvest. Half a crop is realized in this manner. But the best crop, and the one most generally put upon the sod, is wheat which is sown from the middle of August to the 20th of September—the earlier time being the best. The first crop is always a certain one, both in quality and quantity—averaging 25 bushels to the acre, and sometimes yielding 40 and 45 bushels an acre. The land is generally cross plowed immediately after harvest, and sown again to wheat. This requires one good team and is pretty hard work for it. The succeeding plowings are all easy for one team. A horse team will plow with ease two acres a day, six inches deep, which is the most common depth, though I have found that deeper plowing answers a better purpose.

There is no general system of rotation yet adopted, except to take indiscriminately crop after crop of grain, and this without any manure or seeding to grass; and the land is so fertile that it will well reward the farmer for his labor. I do not say this is good husbandry, but it is the most common.

We have some better farmers among us, who instead of burning up their straw to get rid of it, draw it to their cattle-yard, and after it has become rotted by the trampling of the cattle and the soaking of the urine, spread it upon their land. There are many among us who are cultivating the tame grasses clover and timothy, and this is necessary with us, if for no other purpose than to clean our lands which by constant croppings will become foul.

To sum up the advantages which this state possesses; it is of great fertility, easily brought into a state of cultivation, and well adapted to the different branches of agriculture. It is well watered, and well-timbered, while the prairies and openings afford a boundless supply of the best of pasturage, and the low prairies afford quantities of good hay. It possesses great water power which is fast becoming improved. It is studded with thriving villages, and is settled with an intelligent, enterprising people, and lastly, it is healthy—not being surpassed in this respect by any portion of America. T. GREEN. *Waupun, Fon du Lac Co.*

Cutting Wheat Early.

EDS. CULTIVATOR—The subject of the early cutting of wheat has received attention for several years; but I am convinced that it is not understood and practiced to the greatest profit. It has been the common method to put the wheat up in stooks—two rows of bundles, the tops resting against each other. In this way the heads are exposed to the full force of a harvest sun, which soon dries them and the straw, so-effectually as to prevent all nutriment passing from the straw to the grain.

My method, at beginning of harvest for several years past has been this: We begin our harvest early, bind at first in quite small bundles, stook them by putting eight or nine in a stook, with a larger one for a cap. In this way the grain is secured from being suddenly dried, the nutriment from the straw continues to pass to and nourish the grain, as long or longer than if the wheat were standing, and if well put up it is secure from almost any weather; so that our first cut is frequently last carted to the barn or stack. I have taken heads from stooks thus put up, which, with the straw were green, and the grains when shelled were dry, fit

for grinding, but were plump, thin skimmed, and almost transparent, whilst wheat which stood and ripened in the sun, was thick skinned and looked shrivelled, and this in seasons when no rust or casualty attended the crop. We can begin harvest earlier by this method, and our straw will be more valuable for fodder, as well as the wheat for flour. If the crop cannot be cut till nearly or quite ripe, we can then put it in stooks as the stooking is a trifle, and but a trifle more work to an experienced hand. R. WATKINS. *Napoleon, Michigan, June 22, 1850.*

Wire Fence---Red Cedar Hedges.

EDS. CULTIVATOR—Some two months ago I wrote you, making inquiries about the expense of wire and wire fence, which you were kind enough to answer. Since that time I have put up about one hundred rods of wire fence, five strands high. I made it after the plan of A. B., described in your April No. I set chestnut posts at the ends or corners of the lines, and braced them. Having a lot of chestnut rails on hand I cut them in two, each making two stakes, which I set apart the distance of a rail's length. I put my bottom wire 12 inches from the ground, and each wire about 9 inches from the one below it, which makes the fence 4 feet high. I used about half No. 10 and half No. 9 wire annealed. The fence all set and completed, cost me about 37½ cts. per rod.

Were I to set more, I should use no wire finer than No. 9, of good quality. I feel quite confident in regard to my No. 9 wire, but of the No. 10 I am not so confident. It needs to be proved. After setting it, my men drove some cows against it, but it brought them up, and no damage to the wire. Our mode of straining the wire was as follows: Take a hickory stick, say 2½ inches in diameter and two feet long. With an inch and a half auger bore a hole, say two inches from the end; through this put a stick, say two feet long, for a lever. Between this hole and the end of the hickory stick, at right angles with the 1½ inch hole, put through a large wood screw, to prevent splitting. About 6 inches from the other end, put through a hole ¼ of an inch or less in diameter, and your strainer is done. Insert your wire through the lever and post at each end, fasten it at one end, and draw it as tight as convenient with your hands at the other. Slip the wire through the small hole in the strainer, and turn until you have taken out the kinks and made the wire as tight as you please.

I think this strainer preferable to A. B.'s, as it is easily made, and you can strain each wire separately as tight as you please, and one strainer answers for all the fence you may ever wish to make. And should a wire ever break, that alone can be mended without interfering with the others. At first, to hold the wires at the ends, we drove in pins, and then brought them half way round the post to the main wire and twisted a few times around this. But should you wish to alter the wire, or should it break, it is not easy to get it out where the pin holds it. There is no need of a pin, as the wire can be brought back and fastened as above mentioned without, as well as with it; and if you wish to slip it afterwards, you can without trouble. I obtained my wire of Burbank, Chase & Co., in Lowell. They had about 200 lbs. No. 10 on hand, which they sold me at 5 cts.; they ordered me 109 lbs. No. 9, for which I paid 6½ cts. The No. 10 seemed to be a wire of inferior quality such as I would advise no one to use. Although at first cheap, I think in the end it may

prove dear. The No. 9 was soft and strong, and I have no doubt will meet expectation.

Instead of the Three-thorned Acacia, as I last wrote you, I have been advised by a gentleman from Long Island to set Red Cedar, by the side of my wire for a hedge. He recommends to set them, say 4 feet apart, and when they get 4 or 5 feet high, cut them half off and bend them down, when the sprouts will grow upwards and downwards and on-wards until a complete mat of hedge is formed, so that, to use his own language, "the devils can't get through it." I told him if it was so, I would be under great obligations to him, for we have quite a number of that kind about here, and that it was just the fence we wanted. It of course must be pruned upon the sides and on top like other hedges. I would like to inquire, through the *Cultivator*, if you please, about red cedar hedge. I wish it to turn such characters as above alluded to, rather than for beauty or ornament. GEORGE MANSFIELD. *Lowell, Mass., June 26th, 1850.*

Morgan Horses.

EDS. CULTIVATOR—As I am frequently called upon by letter to give the pedigree of the original Morgan horse and of his immediate descendants, I now ask leave, through your columns, to refer those who may not be aware where the information may be found, to the volume of the *Cultivator* for 1846, in the number for January, page 19, and in that for April, page 106.

The very extensive and well-deserved reputation which the Morgan horses have obtained, has furnished quite a strong inducement for the unscrupulous to pass off as such, upon the public, horses of different breeds and inferior qualities; as well as to overstate the pedigree of those which really have a small part of the genuine blood.

Those who become the subjects of these impositions, will of course, be greatly disappointed in their expectations of raising valuable horses. And it is evident that but little reliance can be placed on the results, where the blood of the parents is strained down so low as an eighth or a sixteenth.

From what I have learnt, I am convinced beyond doubt, that these frauds have already been practiced to a considerable extent, not only in your own, but also in other states, and that further acts of the same kind are in contemplation. Indeed I know of several instances where horses are advertised as being of the Sherman, Bulrush, Woodbury, and Gifford stock, which have not a particle of the blood of either running in their veins.

The number of breeding mares possessing a high strain of Morgan blood, whose descent can be satisfactorily traced, is at this time, and for many years past has been, very limited indeed; and there are but few cases where pedigree, on the side of the mare, can be fairly established by convincing evidence.

It is apparent therefore that such persons as desire to obtain Morgan horses of the true blood, must scrutinize, with particular care, the statements of those who offer them either for purposes of breeding or for sale,—and that a neglect of this necessary precaution will not only defeat their own hopes and wishes, but also tend to bring undeserved discredit upon the race itself. FREDERICK A. WIER. *Walpole, N. H., July 16, 1850.*

Maryland Agriculture.

Mr. JOHN R. HOWARD, who lately spent some time in Virginia and Maryland, furnishes the following from his notes on the condition and resources of agriculture in those sections.—EDS.

R. N. Milburn, Esq., of Baltimore, who owns a

farm near the mouth of St. Mary's river, and has lived at that place many years, says, although there have been no surveys with a view to ascertain the *location* and *quantity* of marl, it is certain the beds are very numerous. They are three, six, and sometimes ten or fifteen feet thick, and of an unknown extent. Wherever the marl has been used, it has produced increased crops to an *astonishing degree*. It sometimes lies near the surface, and sometimes six or eight feet below. Most of the beds that have been discovered are in ravines, where the water has washed off the surface and exposed to view the pearly substance. In that part of the country there are many beds of oyster shells, but slightly decomposed. A question arose, how could they have been deposited there? He says by the Indians. They are one to six feet thick, and lie considerably above tide water. Bones of racoons and other animals are found there also. These beds (some of them at least) are found to exist within 3 or 4 miles of where there has been Indian towns. These shells are burnt, converted into lime and used as manure, and large crops of clover, &c., are made to grow where little or none grew before. Then follow crops of corn, wheat, &c., that are large in proportion.

SHEEP HUSBANDRY.—Mr. M. says he bought, in the fall of 1848, of Mr. Reybold, of Delaware, three ewe lambs of the Cotswold breed, for which he paid \$80. Since then, he has raised from them three others, and lost one. He could now sell the six for \$160. His flock of native sheep usually consists of about 60 head. He reserves his clover fields till the clover is in bloom; then puts in the sheep, and some of the crop remains till winter, affording sufficient sustenance for the sheep through the winter, except when there is snow on the ground, at which times he gives them corn fodder.

He says sheep are his most profitable stock, and his land, treated in this way, becomes very *highly improved*; much *more so* than by plowing in the clover, or leaving it on the ground. He has made experiments in these three different methods. He says beans are more valuable than corn for feeding to sheep—they keep the sheep healthy and promote the growth of the wool, more than any other food.

Peat as Manure.

In the Report of the York County (New Brunswick) Agricultural Society, we find some useful observations on the value of peat as manure, by Prof. ROBB, of Fredericton, a gentleman of high standing as a geologist and chemist. He gives three modes by which this substance may be advantageously used for the improvement of soil, as follows:

1st. It may be carted to the barn-yard and spread all around, so as to absorb all the liquid manure, which it will do like a sponge; not only will it thus soak up and fix liquid and gaseous matters, which would otherwise be lost, but it will thereby take on a state of fermentation itself, which will result in its becoming soluble and proper for the food of crops. When one layer is soaked and fermented, more or less, it must be renewed, or replaced by fresh stuff from the bog, which will thus become a permanent benefit to the farm.

2d. The peaty substance may be very advantageously composted and brought to a soluble form thereby. If three loads of half-dried peat earth be mixed with one of stable manure (green,) there will be formed four loads of manure equal in value to cow dung itself, for the ordinary root and grain crops. A layer of dry peat should form the base of the compost heap, then a layer of green manure then alternate layers of peat

and manure, ending with a *thick* layer of peat. If ashes be added, or if the heap be occasionally watered with urine, decomposition will be more rapid, and the compost be more fertilizing. In six weeks, more or less, according to the season, the heap may be shovelled over and then carried on to the field, where its effects are equal, if not superior, to the same quantity of common dung. It may be applied to any soil deficient in vegetable matter, and in any way, exactly as if it were so much well rotted yard manure. By ashes alone, the peaty earth may likewise be converted into the food of plants; but I believe it is best to use them as above directed.

3d. The peat may be burnt in the fields for its ashes, which are applied with very good effect as a top dressing to meadows, at the rate of 40 or 50 bushels per acre.

Agricultural and Horticultural Fairs.

STATE SOCIETIES.—*New-York*, at Albany, Sept. 3, 4, 5, 6.

Ohio, at Cincinnati, Sept. 11, 12, 13. The annual session of the *American Pomological Congress* will be held at the same time and place.

Maryland, at Baltimore, October 23, 24, 25.

Michigan, at Ann-Arbor, Sept. 25, 26, 27.

Rhode Island, at Providence, Sept. 18, 19, 20.

New-Hampshire, at Concord, first week in Oct.

Canada West, at Niagara, Sept. 18, 19, 20.

American Institute, New-York.—The exhibition will open on the first of October, and continue for three weeks. Plowing and Spading Matches at Tarrytown, Oct. 11. Cattle Show, corner 5th avenue and 23d streets, Oct. 16, 17, 18.

Georgia, at Atlanta, Aug. 15.

N. Y. COUNTY SHOWS.—Cayuga, at Auburn, Sept. 24, 25—Saratoga, at Mechanicsville, Sept. 17, 18—Seneca, at Ovid, Sept. 26, 27—Monroe, at Rochester, Sept. 25, 26, 27—Sullivan, Sept. 18, 19—Otsego, Sept. 24, 25—Madison, Sept. 26, 27—Oswego, Sept. 25, 26—Wayne, at Clyde, Sept. 18, 19, and at Palmyra, on the 25th, 26th—Livingston, Sept. 24, 25—Ontario, Oct. 1, 2—Suffolk, Sept. 24—Washington, at Argyle, Sept. 18, 19—Oneida, at Rome, Sept. 18, 19—Clinton, at Keeseville, Sept. 24, 25.

CONN.—New-Haven Hort. and Agricultural, at New-Haven, Sept. 24, 25, 26.

VERMONT.—Addison, at Vergennes, Sept. 25.

Science as Applicable to Agriculture.

The following remarks from the *Farmer's Guide*, a work which we have noticed on several occasions, we recommend to the attention of our readers. Eds.

"Agriculture may perhaps be considered one of the experimental sciences, as its principles are no doubt demonstrable by the test of experiment, although farmers have not yet attempted to deduce principles from practice. The necessity for such a deduction is, no doubt, the less urgent, that husbandry is usually pursued as a purely practical art; and the facility of thus pursuing it successfully, of course renders practical men indifferent to science, as they consider it unnecessary to burden their minds with scientific results, whilst practice is sufficient for their purpose. Could the man of practice, however, supply the man of science with a series of accurate observations on the leading operations of the farm, the principles of these might be truly evolved; but the greatest obstacle to the advancement of scientific agriculture is to be sought for in the unacquaintance of men of science with practical agriculture. Would the man of science become acquainted with practice, much greater advancement in scientific agriculture might be expected than if the prac-

tical man were to become a man of science; because men of science are best capable of conducting scientific research, and, being so qualified, could best understand the relation which their investigations bear to practice; and, until the relation betwixt principles and practice is well understood, scientific investigation, though important in itself, and interesting in its results, would tend to no practical utility in agriculture. In short, until the facts of husbandry are acquired by men of science, these will in vain endeavour to construct a satisfactory theory of agriculture on the principles of inductive philosophy."

Chess will Grow.

Last fall I selected a dozen grains of chess and sowed them; they came up and wintered well. In the spring, I transplanted them, and they are now just heading out, fine chess.

I had some seed wheat last fall which contained a large quantity of chess. I poured it into a strong brine, and then decanted it, so as to turn off most of the chess. It was then sown, and it has but a very few spires of chess in it. W. H. Bethel, Vt.

It is strange that the idea that chess will not grow, should have ever been entertained. It grows as readily, and produces "seed after its kind" with as much certainty as any other plant. This has been repeatedly proved by experiments. Eds.

Leaves as Manure.

Leaves, buds, and tender branches are peculiarly rich in the vegetable alkali; besides which they contain other organic elements derived from the soil, and which, by being returned to the soil, enrich its surface, tending to prevent its exhaustion, or when newly applied,—that is to other ground,—to enrich it more than superficially.

Leaves—and the remark is applicable to the tender branches also—seem destined by nature for the manure of forest land, and indeed, of ground generally wherever trees grow. The roots collect the inorganic elements essential to vegetation from the soil, penetrating deeply and widely; the leaves detain and store up a certain portion of them, with other elements derived from the atmosphere, such as are required for their growth; and these returned to the soil with the fall of the leaf, and there undergoing decomposition, are ready to be appropriated again, and re-administer to the process of vegetable growth. *Farmer's Herald*.

Waste of Manure.

Little or no pains is taken usually to save the liquid manure of animals; no earth or saw dust is placed in or beneath the stable to absorb it; and the barn-yard is often so situated, that all the liquids that would collect in it, run off into the street, or are conducted to the adjoining field, where they are so little spread about, as to injure the crop by producing an immoderate luxuriance. Liquid manure is exceedingly valuable, and the yards and stables of the farmer should be so constructed, that it may all be saved. There should be no outlet to the barn-yard, where the fluids collected in it can run off. They should either be taken away, and applied directly to the land, or poured upon the compost heaps in and around the barn-yard. The turf about his fences and stone walls, or the mud and muck from his swamps, should be collected in heaps or spread around his yard in order to absorb the fertilizing liquids collected there.—*Address of S. HART, Esq., before the Hartford County, Ct., Ag. Society.*

Notes for the Month.

COMMUNICATIONS have been received, since our last, as follows: Prof. Norton, E. G., (written in German,) A. L. Bingham, Sylvanus, Warren Hutchins, R. Watkins, T. Green, D. S. Curtis, D. Thomas, D. T., F. A. Wier, John W. Bailey, A. D. S., W. L. Eaton, A Constant Reader.

BOOKS, PAMPHLETS, &c., have been received, as follows:

The Architecture of Country Houses; including Designs for Cottages, Farm Houses and Villas, with Remarks on Interiors, Furniture, and the best modes of Warming and Ventilating. With Three Hundred and Twenty Illustrations. By A. J. DOWNING, Author of Designs for "Cottage Residences," &c. &c. New-York, D. Appleton & Co. Price \$4. From the Author.

Speech of Hon. J. A. KING, in the H. of R., June 4, on the admission of California. From the Author.

Transactions of the Michigan State Ag. Society, with Reports of County Societies for 1849. From J. C. HOLMES, Sec'y.

TRANSACTIONS OF THE N. Y. STATE AG. SOCIETY.—This volume, comprising the doings of the Society for 1849, is just issued. It contains 944 pages, and is superior in the quality of its matter to any volume which the Society has previously published. It contains the highly valuable and interesting lectures delivered in this city last winter, by Prof. JOHNSTON, the prize essay by Prof. NORTON, entitled "Elements of Scientific Agriculture," (which has also been published in a separate volume,) and which ought to be in the possession of every farmer in the country. The volume also contains the conclusion of the agricultural survey of Washington county, by Dr. FITCH, with several valuable papers communicated to the Society. Several engravings of prize animals, and choice fruits, and representations of the show grounds at Syracuse, are given, which are generally executed in a superior style.

IMPORTATION OF SHORT-HORN CATTLE.—Col. J. M. SHERWOOD, of Auburn, has imported a very fine heifer, now about two years old, and a bull calf eight months old, from the noted herd of Mr. STEPHENSON, of Durham, England. The animals arrived here about the first of July. They had evidently suffered from their long voyage, though they appeared in good health, and will probably recruit rapidly. We shall expect to see them, with some of Col. S.'s other fine animals, several of which were also from Mr. STEPHENSON's herd, at the coming show of the State Ag. Society, at which time we presume they will be prepared to appear in their accustomed plight.

FRENCH MERINO SHEEP.—MR. A. L. BINGHAM, of Cornwall, Vermont, gives the weight of wool, unwashed, obtained the present season from 83 Merino sheep, of the "Taintor Stock," together with the aggregate live weight of carcass of the same sheep, obtained after they were shorn. Twenty-seven of these are stated to have been only ten months old when shorn. The aggregate of eighty-three sheep, was 10,458 lbs., being an average of 126 lbs. each. Aggregate weight of wool obtained from the eighty-three sheep, was 1,494 lbs., or an average of 18 lbs. each fleece, and two and two-sevenths ounces of wool for each pound of carcass. The growth of the fleeces is stated to have been just one year, with the exception of the lambs which were but ten months old. The ewes, it is stated, produce "three crops of lambs in two years."

ETRURIAN WHEAT.—E. CORNELL, Esq., of Ithaca, informs us that he has raised this variety of wheat for the last five years, having obtained the first sample of it from Mr. ELLSWORTH, late Commissioner of Patents. He considers it a very valu-

able variety, being hardy, yielding well, and affording a superior quality of flour. At one of the agricultural discussions in this city the past winter, Mr. BREWER, of Tompkins county, spoke favorably of this kind of wheat, stating that it weighed 64 pounds to the bushel.

THE SEASON AND CROPS.—The month of April was remarkable for its coldness, and May was equally remarkable for its wetness, both circumstances conspiring to render crops generally backward. Planting, except in favorable locations, was much delayed, and in some instances the seed perished without vegetating. In this section there has been a liberal supply of moisture, but in the western part of the state, and in Ohio and Michigan, a severe drouth was experienced through the month of June. The growth of grass has been very luxuriant, except in situations where drouth prevailed, as just mentioned. Corn looks well, considering the lateness of planting.

HEAVY RAINS.—We have had several copious rains in this vicinity, which have considerably interfered with the process of hay-making; and on the 5th of July a storm occurred which occasioned considerable damage by flooding crops on the banks of streams, carrying away bridges, &c. Nearly three inches of water fell at this place, in the space of four hours. This storm was, however, comparatively limited in extent, especially from north to south, in which direction its force was principally confined to a width of less than thirty miles. From west to east it extended two hundred miles.

On the night of the 18th of July, and the forenoon 19th, we were visited with a rain storm of great extent. We hear of its effects as far south as Chesapeake Bay and northward as far as lake Champlain. Its extent from west to east, we have not yet learned; though it was very severe in Central and Western New York, and reached eastward as far as Boston. Over all this territory the rain was very heavy, and to the southward, from New York to Baltimore, it was accompanied with very severe wind, which occasioned considerable damage to shipping, and to buildings in cities, and in many instances, great injury to fruit and other trees. A letter from Mr. THOMAS HANCOCK, of Burlington, N. J., dated July 19th says—"We have had an awful storm of wind and rain. It commenced during yesterday afternoon, with the wind south, and soon changed to the north-east, and the rain fell in torrents through the night. The damage done to fruit-trees, and fruit is very great. Much of the green fruits shaken off, and many of the trees are blown down. I have eight large apple trees, and three large pear trees prostrated, besides many more being injured by being blown partly down. The damage to oats is great—they being beaten down as though a roller had passed over them."

A letter, dated July 20th, from Mr. JOHN JOHNSTON, near Geneva, N. Y. says—"It has rained almost incessantly since the 18th, with high wind the greater part of the time. I have never seen such a rain-storm at this season of the year, in the twenty-nine years I have lived here. Crops of all kinds are prostrated and the damage will be immense."

The water in the Hudson at this place, rose to a greater height than it had been for two years previously—completely submerging the islands and alluvial banks in the vicinity, and doing incalculable damage to crops of vegetables cultivated for market, and ruining the hay crops on all low lands. We understand the damage to grass, broomcorn, and crops, along the Mohawk flats, and other large streams, is beyond estimation. Such a flood in the month of July, has seldom, if ever, happened before in this region.

PRICES OF POULTRY AND PHEASANTS IN ENGLAND.—A letter lately received from Messrs. BAKER, of London, gives the following as the prices of birds from their celebrated "pheasantry."

Malay cocks, \$6.25 to \$8.75 each; hens, \$2.50 to \$3.75 each.

Cochin-China cocks, \$10; hens, \$5 to \$7.50.

Speckled Dorking cocks, \$5; hens, \$1.75 to \$2.

Spanish cocks, \$6.25 to \$7.50; hens, \$2.50 to \$3.

Sussex cocks, \$5; hens, \$1.75.

PHEASANTS—Golden, \$17.50 per pair.

" Silver, \$17.50 "

" English, \$6.70 "

Messrs. BAKER are large breeders of ornamental poultry and water-fowl of every description. It may be interesting to some of our fanciers to know where they can obtain choice birds.

CATTLE FOR NOVA SCOTIA.—JAMES IRONS, Esq., as agent for the Provincial Agricultural Society of Nova Scotia, purchased, in June last, several fine animals in this vicinity, viz, *Ayrshires*, purchased of E. P. PRENTICE, Esq., one two-year-old heifer, two yearling do., one yearling bull calf; of *Herefords*, purchased of E. CORNING, Esq., one yearling bull and one yearling heifer. All these were very fine animals, and will, we trust, well reward the praiseworthy enterprise of our brother farmers of Nova Scotia.

SALE OF MR. SHEAFE'S STOCK.—Our readers, who wish to purchase short horn cattle or South Down sheep, will bear in mind that the sale of Mr. Sheafe's stock, is to come off at New-Hamburgh on the 29th inst. See advertisement on last page of this paper.

LIVE-STOCK AT AUCTION.—We invite attention to the advertisement of Mr. STICKNEY, in this number. He has taken great pains in procuring the best Devon cattle, South Down sheep, Suffolk and other breeds of pigs, and has excellent specimens of all these stocks. His swine are much esteemed for their fattening tendency, and when slaughtered, bring an extra price in market, on account of the superior quality of the pork and the great weight in proportion to offal. A better opportunity for obtaining stock of these kinds, can hardly be expected to occur.

COUNTRY SEATS.—The Rensselaer County Ag. Society has offered a premium for the best designed "country seat." Competitors are requested to send drawings and descriptions, showing the plans of their dwellings, gardens and grounds; and the name of the successful competitor is to be reported to the State Society.

WHEAT AND CHASS.—P. GREGORY, a correspondent of the *Canadian Agriculturist*, states that several years ago he found wheat and chess on the same stalk; and supposing at the time that both had grown from the same seed or germ, he drew the inference "that wheat must produce chess, or chess wheat." He therefore set himself to experimenting on wheat and chess; but after all his experiments, he says—"like produces like, in spite of all the ill treatment I can give them." He asks for an explanation of the mystery. The editor of the paper referred to very sensibly observes that "oats as well as chess, have been found adhering to a head of wheat," but their growth from the same stem was only "apparent"—the oats or chess was only entangled with the wheat.

WESTERN BUTTER.—Cobb & Co., of Buffalo, in a letter to the *Ohio Cultivator*, state that the receipts of butter at that port for 1849, amounted to 9,714,170 lbs., more than two thirds of which was from Ohio. A very small proportion only of this ranked as prime—

far the greater portion having been received as *grease* butter. It is stated that the great bulk of Ohio butter did not net the shipper more than six to seven cents per pound. The bad quality of the butter is charged to several causes; as impure salt which it is said converts the butter into a "discoloured pasty substance resembling soap"—the salt imperfectly incorporated with the butter, the butter-milk imperfectly separated, exposure of the butter to the air, both before and after it is packed, &c. The improvements suggested, are the use of solar evaporated sea salt, greater care in packing—"smooth, clean, well made, oak kegs, capable of holding about 100 lbs," being recommended, and the kegs to be protected as much as possible from the air. Placing the kegs of butter in larger casks and filling the space with oats, is thought to be a good mode of sending to market. The oats, it is said, "will pay cost and transportation."

LONG-WOOLED SHEEP.—A writer in the *American Farmer* states that he was present at the shearing of several long-wooled sheep owned by JAMES N. GOLDSBOROUGH, of Talbot county, and the following is given as the weights of the carcasses and fleeces:

A three year old Oxfordshire ram weighed..	235 lbs
His fleece, washed wool, weighed.....	7 1/2 lbs
A yearling grade Lincoln ram, weighed....	171 1/2 lbs
His fleece washed wool weighed	8 1/2 lbs
A three year old New Leicester ewe	212 1/2 lbs
Her fleece washed	7 1/2 lbs
A three year old New Leicester Ewe.....	194 1/2 lbs
Her fleece washed.....	7 1/2 lbs

USE OF CARBON IN THE SOIL.—It has been ascertained by experiment that carbonic acid is essential to the growth of plants; but it has been a question whether the plant could obtain through its leaves a sufficiency of this food from the atmosphere, or whether it is necessary that it should be present in the soil. Liebig and his followers have held that it was not necessary in the soil—the only use of vegetable or organic matter being, as they argued, to impart the requisite "physical texture" to the soil. A paper lately published in France on the food of plants, gives the results of some experiments on this subject, which are important. The experimenter took two boxes, in one of which was placed a quantity of soil which had been burned so as to destroy all organic matter; in the other a like quantity of the same kind of soil in its natural state was deposited. Peas were planted in both boxes, and the growth of the plants in the box carefully compared. Those in the natural soil flourished much the best, and no reason could be assigned for the difference, except the greater quantity of carbon in the natural soil.

THE WOOL CLIP OF 1850.—The shipments of wool this season to the 1st July, from Cincinnati, amount to 1784 bales and 14,366 lbs., against 913 bales and 569 lbs. to same date last season. One steamer from St. Louis, a few days since, discharged 101 bales (13,432 lbs.) of wool, shipped from Booneville. At Pontiac, Michigan, to the 20th ult. over 200,000 lbs. had been purchased of the clip of 1850. The fleeces have been unusually heavy this spring—one merino buck in Monroe county, New York, yielded, it is said, 18 lbs.! It is estimated that 65,000,000 lbs. will be wanted the present year for domestic consumption. In Macomb, Michigan, about 10,000 lbs. of wool have been already purchased this season, which is double the product of that county in any previous year. *Providence Journal*.

CHEAP ICE.—Mr. NAHUM HARDY, in a communication to the *Mass. Plowman*, recommends that every neighborhood should have an ice-house, which should be of sufficient capacity for holding all the ice that may be wanted in the vicinity. The house should be near

where the ice is made. If there is no natural pond, it is an easy matter to make one. His mode of keeping ice for daily use, is worthy of notice. 'The box which I have used for the last six years, is made of common inch and a quarter pine boards, and cost two and a half dollars; is about four and a half feet long, and three and a half wide, and about three deep: this stands, through the hot season, as near the cellar stairs as it can be conveniently set; into this, about once in sixteen days, I put as much ice as can be conveniently stowed, and have room at top to set such things as we wish to keep as cold as ice. A firkin of corned meat in one corner, a box of butter, fresh meat, fish, anything we think proper. The expense of all this is only from three to four dollars a year.'

INFRINGEMENT OF PATENTS.—The late Commissioner of Patents, in his Report, makes the following just observations on this subject:

"The experience of every day, and the prolific crop of litigation which has recently sprung up from the unscrupulous and remorseless invasion of the rights of patentees, by persons who have no claim nor pretension to the name of inventor, nor of the fruits of inventive genius, point with impressive force to the necessity of some reform in the existing laws which shall give greater security to the rights vested in patentees. The facilities of evading punishment or retribution for a wilful infringement of the property of patentees is now so great, that the whole term during which a patent runs is not sufficient, if it be for a very valuable invention, to vindicate and establish the just claims of the inventor. This evil could be remedied by a few simple amendments to the existing law of patents."

BANTAMS—Sport in the Drawing Room.—On Saturday, the 1st of December, Beacon Lodge, the residence of the Hon. Mr. and Mrs. Berkeley, was opened for the reception of visitors to witness a show of beautiful bantams, the property of the Marchioness of Hastings and the Hon. Mrs. Berkeley, for a prize. The smallest bird to be adjudged the winner. Three two years old hens to be shown by each lady. A diminutive hen, weighing only nine ounces and three quarters, the property of the Hon. Mrs. Berkeley, was adjudged the winner. Among the guests who partook of the hospitalities of the table, were the Marchioness of Hastings and Captain Yelverton, Col. and Mrs. Clinton, Mrs. and the Miss Raynardson, of Hinton, Admiral, Major, and Miss York, Mr. and Mrs. Lock, Mrs. Howell, Mr. Edward Stratton Berkeley, and Mrs. Roebuck, &c. *Eng. paper.*

GREAT YIELD OF HAY.—The *Greenfield (Mass.) Gazette* states that a field containing 7 acres and 100 rods belonging to H. W. CLAPP, Esq., of that town, has yielded the present season 29 tons 497 pounds of hay, by actual weight; or over four tons to the acre.

ADVANTAGE OF RAISING GOOD STOCK—Let us look for a moment at the raising of stock for market. Does it cost any more to rear for sale a good colt, than it does a poor one? Probably not five dollars more. The poor animal is a drug in the market at from \$60 to \$75, while the other will command readily from \$100 to \$200. Good horses are and will ever be, in demand—are and will ever be sources of profit to the farmer, in a grazing district. But good horses will not come from poor stock and neglect. Constitutional peculiarities, family traits of health, strength, endurance, docility, &c., follow physiological laws as surely here as in the human race. If then the farmer would get profit from his horses in the market, he must make them enough an object of attention, that he shall raise, only from good stock and with due regard to the laws of animal physiology. *Granite Farmer.*

Prices of Agricultural Products.

[Review of the Market for the last month.]

ALBANY, JULY 20, 1850.

The market for most descriptions of produce since our last report, has been comparatively dull, and will probably continue so for a month to come. An extensive and profitable fall business is very generally anticipated.

FLOUR. The sales during the month have been about 20,000 bbls. chiefly in retail lots for the trade or on Eastern orders; the range between brands of common State flour, liable to scour, and brands of fancy and extra Genesee has become wider, and while the former have declined 25 to 37½c. per bbl., the latter have been firmly maintained. Quotations may be given at \$5a\$5.25 for common to straight State, \$5.50a\$5.62½ for Western, \$5.75a\$5.87½ for fancy do., \$6a\$6.12½ for pure Genesee, \$6.12½a\$6.25 for fancy do., and \$6.25a\$7 for extra do.

The first lot of new Genesee wheat flour was received here on Wednesday, and sold in half bbls. at \$7.50 the pair.

GRAIN. For prime Genesee wheat there has been a fair milling demand, but quotations, in view of a bountiful harvest, rule lower, the sales are 12,800 bush. pure Genesee, at prices ranging from 11½ to 13½c., at which rate a sale of 1700 bush. was effected yesterday. Rye is in moderate demand; we report sales of 5,800 bush. at 59a 61c.; the market is firm at the higher quotation. Oats are in good demand, and quotations have been maintained throughout the month with uniformity, ranging at 46a48c. for Canal, and 49a50c. for heavy Canadian; with sales of 95,000 bush. The demand for Corn has taken all offering, and still continues in excess of the supply; the sales have been principally of Western mixed, and quotations which at the close of last month were 59a60c. declined to 57½a59c., and then rallied again to 61½a62c., at which rate sales were made yesterday; round yellow is 59½a61c., and damaged 55a59c.; the aggregate sales since our last report have been about 185,000 bush.

FEED has been in good supply and the market easier; the transactions are about 75,000 bush. at a slight reduction upon our last quotations.

SALT. The market closes rather firm for bbls., which may be quoted at 98a100c. Bags 11c.

WHISKEY is still in limited supply; the sales are about 1200 bbls. Ohio and S. P.; the market is 25½c. for the former and 26c. for the latter.

WOOL. The only sale of moment of the new clip was made yesterday at 37½c. for 5,000 lbs. medium mixed; in the street lots are taken at 28a37½ according to grade.

PROVISIONS.—The trade is confined almost exclusively to a retail demand. We notice sales 15 hhd. Western smoked shoulders at 4½c. In Pork, a lot of 42 bbls. clear sold at \$12.50, and in Beef, 200 tierces City Mess at \$16.

Wool Market—July 24, 1850.

Before the shearing was fully completed, much excitement was observed in the market, caused mainly by the strife between the purchasing agents of manufacturers and dealers; and nearly the entire clip of the country was bought up with unusual expedition. Prices in the Western States advanced 5 to 7c., and in the Northern, Eastern and Middle States 3 to 5c. above those of last season. The prices of woolen goods continue lower than in January and February last; but notwithstanding this, there is a strong probability that the ruling prices of wool will be fully maintained; and if the manufacturers work up their wools with but little profit, they may censure themselves quite as severely as they do the speculators—as their movements to obtain the wool direct from the growers, quite as much as any other cause, produced the excitement. We hear of sales of very superior clips to manufacturers' agents, in Dutchess Co., and in Washington Co., Pa., at 50 to 55c. The law of demand and supply will materially assist in keeping prices up. The latest intelligence from Europe shows great activity in the market, at advanced rates. We quote,

American Saxony Fleece,	44a50c.
Full blood Merino,	40a42c.
½ and ¾ do.	36a38c.
Native " ¼ do.	31a34c.

Hay, Straw, and Corn Stalk Cutters.

THE Celebrated Patent Adjustable, Spiral Knife Hay Cutter. Premium Straight Knife Hay Cutter. All sizes, for Hand or Horse Power. Warranted.

Mediterranean Seed Wheat, of a choice quality and pure. This wheat is coming into very general use, and is much approved of. Also, other varieties of Winter Wheat and Rye.

For sale at the Albany Agricultural Warehouse and Seed Store, 369 & 371 Broadway, Albany.

August 1, 1850.

EMERY & CO.

Taintor Buck for Sale.

THE subscriber has for sale a Full Blood Merino Buck, purchased of J. A. TAINTOR in the fall of 1847. Bred by him from his importation of 1846.

This Buck is now 3 years old, and surpassed by none for beauty of form with weight of carcass and fleece.

Those wishing a cross from this Buck with Paular ewes, will please notice advertisement in May No. of Cultivator, page 188. Galway, Saratoga Co., Aug. 1—1t.* ALFRED H. AVERY.

The Cottage in the Glen.

BY SYLVANUS.

A little cottage lieth,
 Embowered in the glen,
 Secluded from the bustle
 And crowded haunts of men.
 A mountain riseth o'er it,
 A rill flows by the door,
 An oak tree stands before it—
 Beside the cottage door.
 Upon its walls are creeping,
 Fresh vines of living green,
 While from their dark leaves peeping
 Bright golden flowers are seen.
 And many birds are singing,
 Upon the old oak tree,
 And lightly they are winging
 Their courses o'er the lea.
 A group of merry children
 With cheeks of ruddy hue,
 Are sporting by the streamlet
 So beautiful to view.
 Around the cottage spreading,
 On every hill and vale,
 The golden grain is bending,
 Before the rising gale.
 The cot, the hill, the river,
 The oak tree by the door,
 The many birds that revel
 The cottage front before,
 Seem like some fairy picture
 Engraven on the eye,
 The pencillings of fancy,
 Which vapor-like will fly.
 But no! to fairy regions,
 'Tis vain for us to go,
 To find more glowing pictures
 Than industry can show.
 For beauty ever throweth
 O'er rustic life a charm;
 Here peace will hover smiling,
 Secure from strife's alarm.
 Where'er the farmer dwelleth,
 Neath thatch or lordly dome,
 There peace, and joy, and beauty,
 Will ever find a home.
 Then let us crown with honor
 The hardy sons of toil;
 May Heaven bless with plenty
 The tillers of the soil!

East Weare, N. H.

The American Live Stock Insurance Company,
At Vincennes, Ind.

CHARTER unlimited. Granted January 2, 1850. Capital \$50,000! For the Insurance of HORSES, MULES, PRIZE BULLS, SHEEP AND CATTLE, of every description, against the combined risks of Fire, Water, Accidents and Disease.

Losses paid in 30 days after proof of death.

Directors.—Joseph G. Bowman, Hiram Decker, M. D., Isaac Mass, George D. Hay, John Wise, Alvin W. Tracy, Hon. Abner T. Ellis, Abm. Smith, Hon. Thomas Bishop, Joseph G. Bowman, President. B. S. Whitney, Secretary. Wm. Burch, Treasurer.

Aug. 1, 1850—1yr.

B. P. JOHNSON, Agent, Albany.

Farm and Stock for Sale.

THE subscriber will sell at auction, on the 10th of September next, (if not previously disposed of at private sale,) his farm, situated in Westminister, Vt., containing upwards of 200 acres, nearly 100 acres of which is alluvial land of the most productive kind, lying on the bank of the Connecticut river. He will also sell at the same time, the live-stock of said farm, consisting of about sixty head of superior neat cattle, mostly Devons, thirty South Down sheep, and fifty swine of Suffolk, Middlesex and Essex breeds.

Among the Devon cattle, are one very fine bull, two years old, imported from England; another, seven years old, purchased of Geo. Patterson, Esq., of Maryland; another, one year old, bred on the farm. Several of the cows are pure Devons of the very best blood and quality, and the whole lot were either selected, or bred by the subscriber with great care. Of the South Down Sheep, six were imported—others were purchased of Hon. Daniel Webster and Col. J. M. Sherwood; and these, with their descendants, constitute the flock. The older swine were mostly imported, and comprise the best specimens of their respective breeds which could be obtained in England. Their stock has now become well known in this part of the country, and is so much esteemed as to need no praise here.

Boston, Mass., August 1—21.

WILLIAM STICKNEY.

Transactions of the N. Y. State Ag. Society.

TRANSACTIONS of the New-York State Agricultural Society, from 1841 to 1849, eight vols., price \$8, for sale at the office of THE CULTIVATOR.

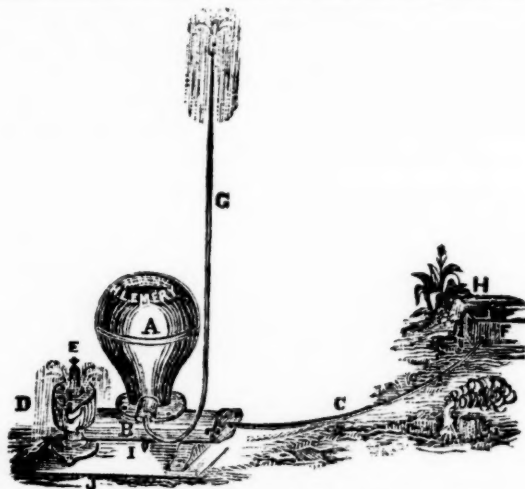
Wire for Fences,

ALSO Staples ready made, by the pound, at price of wire and 4 cents per hundred staples for making, (machine made.)

Our Wire is of the best quality of iron, used by our Telegraph Companies, &c., which needs no annealing whatever, in being worked.

It is a fact acknowledged by all wire manufacturers, that the process of annealing iron wire opens its pores to the effect of the atmosphere, lessens its weight 12 to 15 per cent., lessens its tenacity for tension 33 per cent., and destroys its elasticity. Fence makers will find it much cheaper to use tough, bright wire, in all cases, even at one to three cents per pound extra, than the cheaper qualities of iron at their value, which require annealing to be used.

Nos. 7, 8 and 9, for 5½ cents; Nos. 10 and 11, for 6 cts per lb
 August 1, 1850. For sale by EMERY & CO., Albany.



Hydraulic Water Rams.

THIS simple apparatus for elevating water from a spring or brook, has now been very extensively and favorably introduced, and enables the persons having a good spring of water below their buildings, to have a constant, never failing stream of water at any place desired, and so long as water will, of its own gravity, run down hill, so long it may, by this simple machine, be made to run up hill to any desired elevation. Full directions accompany each machine, enabling the purchaser to put them in operation himself, and all are warranted to operate satisfactorily. Price from \$8 to \$25. For sale, wholesale and retail, at the

Albany Agricultural Warehouse of

EMERY & CO,

Aug. 1, 1850.

369 & 371 Broadway, Albany, N. Y.

Nurserymen's Agency,

187 Water Street, New-York.

THE business connected with this Agency, having increased beyond the expectations of the subscriber, he has taken the above more convenient and eligible store, and aided by experience, has prepared to meet the increasing demand upon his services.

He will import the coming season, a full supply of the following Stocks, Seeds, Trees, &c., &c., and solicits all his friends to send their orders before the 20th of August, to prevent disappointment.

He also tenders his services for the purchase or sale of anything in the business, and will give prompt attention to the receiving and forwarding any goods consigned to his care. Importations passed at the Custom House, the goods properly taken care of, and re-packed when necessary.

Imported 1st quality Stocks.

Quince,
 Pear,
 Mahaleb Cherry,
 Paradise Apple,
 Plum.

American Stocks.

Apple,
 Pear,
 Plum,
 Cherry.

Imported specimen Fruit Trees, of any kinds required, from the best nurseries. Also,

Norway Spruce,
 Silver Fir,
 Scotch Fir,
 European Larch,
 Juniper,
 Mountain Ash,
 English Elm,
 Wych Elm,
 Chinese Arbor Vitæ,
 Siberian Arbor Vitæ,
 Irish Yew,
 Hollies,
 100,000 two year old Buckthorn Plants, for hedges, very fine.
 100,000 Black Mazzard Cherry Stocks.

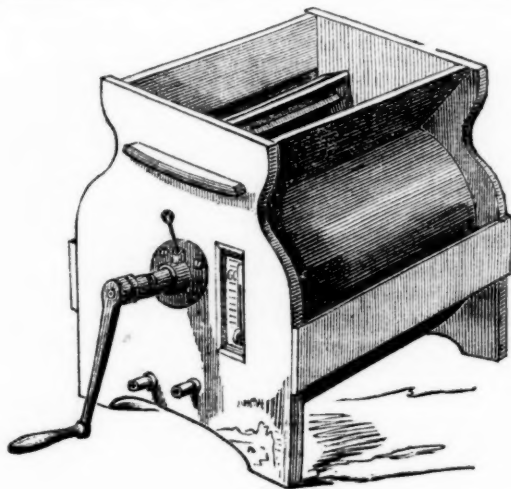
Minetta Rose Stocks,
 Standard Roses,
 Prize Gooseberries,
 And Seeds of any kinds if ordered in good season. Also for sale.
 2,500 Dwarf Cherries. Budded on the Imported Mahaleb Stock.
 30,000 2 yr. Osage Plants.
 Osage, Apple, and Pear seed.
 Plum, Cherry and Peach pits.

Pruning and Budding Knives, Labels, Flower Pots, Propagating Glasses, Russia Mats, Twine, &c., &c., with any thing required in the business.

GEO. G. SHEPPARD,

Aug. 1—11.

187 Water St., New-York.



Compressing and Thermometer Churn Combined.

THIS combination and arrangement forms the best hand churn now before the public.

It has the Double Zinc Cylinders for facilitating the process of obtaining the proper temperature by means of hot or cold water, without mingling it with the milk and cream. A Thermometer is neatly set in one end to enable the operator to know the proper degree of temperature at which to commence churning. The bevel floats which have been before described, are used without any shaft through the churn, by having a dowel at one end, and a square socket at the other, which receives the end of the short crank when it is suspended and propelled. The crank has a groove turned in its round part to receive a pin, which pin drops into the groove when the crank is in its place. To wash and take out the butter, all that is necessary is to raise the pin and withdraw the crank far enough to relieve the dasher, when it is readily taken out.

They are manufactured and sold, wholesale and retail, at the lowest prices, (the cost being but trifling above Kendall's, of corresponding sizes,) by

EMERY & CO.,

At the Agricultural Works, Warehouse, &c.

Aug. 1, 1850.

Nos. 369 & 371 Broadway, Albany, N. Y.

To Farmers and Gardeners.

SEYMOUR'S GRAIN DRILL.—This DRILL, which was patented in September, 1849, is one of the latest improvements in Drilling Machines, and better adapted to the wants of the farmer than any now before the public. It sows or plants all kinds of grain and seeds, from peas, beans, corn and cotton, to the smallest seeds—and combines the advantages of sowing either broadcast or in drills. It is an excellent Broadcast Sowing Machine, when the drill teeth and conducting tubes, (which are very easily detached,) are taken off.

Many farmers soak their wheat in brine or other liquid, (in which the good seed sinks while the foul floats off,) for the double purpose of separating it from foul seed and rolling it in lime, plaster, or other fertilizing substances. This has the advantage over other drills, inasmuch as it performs well in sowing grain thus prepared, while they utterly fail in the attempt. Wet wheat, oats or white caps, which so readily clog other machines, are not serious obstacles in this. Those who wish to soak their seed for any purpose whatever, or mix with it any fine fertilizers, such as lime, plaster, bone dust, &c., and also those who prefer threshing with a flail, to avoid the injury done to the seed by threshing with a machine, will find this the Drill for them.

When drilling with this machine, the grain falls from the grain-box to the tubes, (a space of six inches,) in full view of the person attending it—so that, in passing over the field, he may be constantly assured that the seed is deposited as he designs. The teeth are all raised from the ground at once, with one lever, and the seed all stopped at once; or one may be raised at a time, and the seed it discharges stopped. The convenience and simplicity with which this machine is managed, is unparalleled. No necessary expense or pains have been spared in making it as desirable, in all respects, as possible; and after many, and the most satisfactory experiments—not in the winter on the floor of the machine shop merely, but in seeding time, with the farmer, under various circumstances, on rough and smooth, hilly and level, stony and clear land—the inventor (who was bred a practical farmer, and ought to know something of the farmer's wants,) feels assured that the machine is not only established on correct principles, but is got up in that simple and permanent style and good taste which cannot fail to suit all.

The first premium for a Grain Drill capable of depositing fine manures with the grain, was awarded to this machine as the Fair of the New-York State Agricultural Society, held at Syracuse, in September, 1849. It also received the first premium at the Michigan State Fair, in 1849, and the first premium of the Ontario County Society.

The following facts will be duly appreciated by the intelligent farmer: 1st. A good drill deposits the grain nearly at a uniform depth. 2d. The seed is all covered. 3d. It is left to come up in a small, shallow trench, with a ridge of earth on each side. 4th. One man and a team, with a good Drill, will put in as many acres of grain in a day, as three men and two teams, in the usual way of harrowing or plowing in after broadcast sowing. 5th. The ridges each side of

the wheat protect it from the severity of the cold winter winds; and frequently the snow lodges on the wheat in these trenches, which would otherwise be left bare, and thereby greatly exposed to injury. "Last, yet not least," in that trying time for wheat—in the spring of the year—when alternately freezing and thawing once in twenty four hours, for days and sometimes weeks, frequently destroys the crop—these small ridges of earth are settling down and covering the roots of the wheat, and thus they save the crop from the destroying influences of the frost. From these facts, as well as from many experiments, we come to the following conclusions: 1st. That the saving in seed, should be a sufficient reason to induce every person to sow his grain with a Drill. 2d. That the saving in labor is also a good and sufficient reason for thus sowing it; and, 3d. That the protection from "wind and weather," derived from this mode of sowing, should be quite a sufficient reason why every grower of winter wheat should sow it with a Drill.

SEYMOUR'S GARDEN DRILL

Is a small Machine, of suitable size to be drawn by a man. It is got up on the principles of the Grain Drill, and will plant peas, beans, beets and even carrots, or any kind of garden seeds, mixed with plaster, &c. It is very convenient for large gardeners, as it will sow five rows at once, as readily as the Garden Drills in common use will sow one, and is much less liable to clog. SEYMOUR'S BROADCAST SOWING MACHINE supplied to order.

RECOMMENDATIONS.

A few certificates, from the most reliable sources, are subjoined:

Mr. Seymour—Sir: With the Grain Drill which I purchased of you this season, my son, a lad 16 years of age, has put in about 50 acres of wheat for me, and with some of it about a bushel and a half per acre of ashes and hen dung was mixed, and all to my entire satisfaction. He has also drilled in about one hundred acres for others, and I believe all are well pleased with the machine; and I must say I prefer it to any I have seen.

IRA R. PECK.

East Bloomfield, Sept. 17, 1849.

Mr. P. Seymour—Dear Sir: You ask for my opinion with regard to the Wheat Drill I purchased of you this fall. Without specifying particulars, I would express my unqualified approbation of it over that of any other which I have seen in use. I am somewhat enthusiastic on the subject of drilling, believing it will soon be universally adopted by farmers. I would not willingly disparage the patents of other individuals. In haste, with great respect, yours, &c.

Gates, Sept. 10, 1849.

CALVIN SPERRY.

This may certify that I have used Mr. Pierpont Seymour's Wheat Drill, and I consider it just the thing for putting in wheat.

WM. OTIS.

Lancaster County, Pa.—We, the undersigned, have seen and examined the Seed Drill of Pierpont Seymour, of New-York State, in all its operations, and verily believe it to be the best we have ever seen, and will, we have no doubt, supercede all others now in use.

EDWARD LAMMEY,

JOHN HUDDERS,

ROBT. W. HUDDERS, Mach.,

WM. H. MILHOUSE,

FREDERICK ZARRACHE,

DAVIS ATKINS,

ELI ROBERTS,

JAMES H. NOBLE.

Chester County.—We have also seen the operation of the above machine, and fully concur in the utility of the machine, and will, we have no doubt, when it becomes generally known and appreciated, supercede all other machines now before the public.

HENRY A. JOHNSON,

ENOCH L. TAYLOR,

CLOUD CHALFANT,

JOHN M. KELTON,

REUBEN CHALFANT,

JOHN S. CARLILE,

EUCLIDES P. SHELTON

Mr. Seymour—Sir: I have used the Grain Drill I purchased of you to drill spring wheat. A part of the field I sowed broadcast. The appearance of the crop is now in favor of the part put in with the Drill. I have also used the Drill to sow field beets, and am satisfied that the seed can be distributed as evenly and expeditiously as any grain, which is at the rate of about ten acres a day. The Machine, by taking off the drill teeth, makes a good Broadcast Sowing Machine, which is valuable for sowing plaster, clover seed, and any grain a person wishes to sow broadcast. I believe the Drill and Broadcast Sowing Machine will soon come into general use.

East Bloomfield, June 1st, 1849.

HARLOW MUNSON.

I have examined certain certificates in the hands of Mr. Seymour, in favor of his Grain Drill, one of them from Ira R. Peck. I am personally acquainted with Mr. Peck. His statements can be fully relied on. The other certificates, I have no doubt, are from equally reliable sources. I have myself heard the Drill spoken of in high terms of commendation, by farmers who have used it; and have also seen it in operation, and believe it to be at least one of the very best in use. I was present at the State Fair in September last, where the first premium was awarded to Mr. Seymour for his Drill. I have the confidence that any statement which Mr. Seymour would be likely to make in regard to the Drill, would be strictly true.

ISAAC W. MITCHELL,

Justice of the Peace.

East Bloomfield, Feb. 5, 1850.

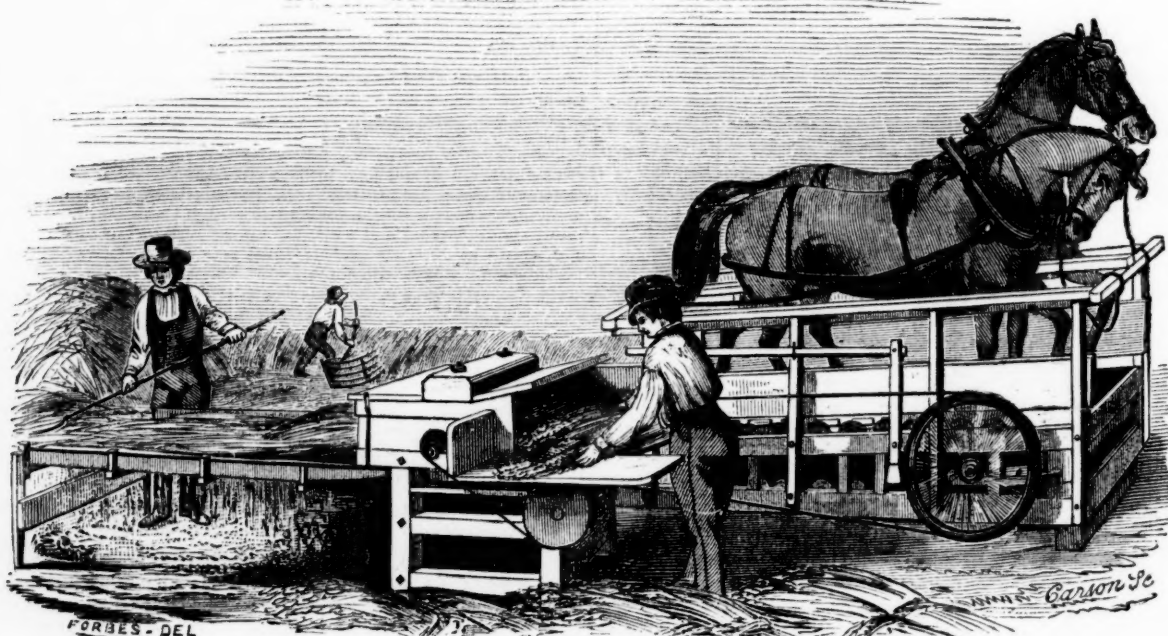
Many other certificates of the same import have been received from many persons in this and other States, which are not deemed necessary to specify.

The subscriber tenders his thanks to his former friends and customers, and invites them, and all others desiring anything of the kind, to examine the above described Machines. The right of either of the above machines can be had on such terms as to make it an object for manufacturers or dealers to purchase.

PRICES.—Price of Drill with 9 Teeth, \$80; with 7 Teeth, \$70. Garden Drill, \$50. Broadcast Sowing Machine, \$45.

PIERPONT SEYMOUR.

East Bloomfield, Ontario County, N. Y., Aug. 1, 1850—t.



**EMERY & CO.'S
LATEST IMPROVED RAILROAD HORSE POWER, AND OVERSHOT THRESHING
MACHINE AND SEPARATOR.**

THE above cut represents this most useful machine, with the **LATEST IMPROVEMENTS**, *For which Patent is secured*, embracing some of great value and importance—which have suggested themselves from time to time as the various kinds made and sold by us have become worn, used and failed.

The most important of these consists principally in the mode of applying the power and motion from the endless platform to the shaft of the main Driving Pulley, and obtaining the necessary motion for the **OVERSHOT THRESHING MACHINE**, without crossing bands or intermediate gearings, and at the same time dispensing with the small pinions and cogs on the links of the endless platform,—thereby combining **GREATER STRENGTH AND DURABILITY** with **LIGHTER FRICTION**, without the liability of breakage of links, or the wearing of links and pinions,—(no small item in the expense of repairs in most other kinds of powers in use.) The farmer or mechanic is enabled to perform a greater amount of work, or to operate with less power or elevation, as best suits his wishes.

Having been long engaged in the Manufacture, Introduction, Sale, &c., of the various kinds of Horse Powers, for different purposes, and at all times adopted such improvements as from observation and experiment have seemed necessary and desirable, we feel confident that in this Power, as now manufactured, all that can be desirable, is found to a greater extent than any heretofore sold by us, or with which we are acquainted. They were introduced to some considerable extent last season, and wherever used side by side with the most approved Powers of other kinds, have given unqualified satisfaction, and been preferred.

The Overshot Threshers and Vibrating Separators, with improvements, have been sold with like success as the Powers. They admit of a level feeding table, thus avoiding accidents, (which often occur with the inclined feeding board,) by preventing hard substances, Sticks and Stones from getting into the Machine and breaking Spikes, endangering those engaged with them. The Cylinder Shaft, (of Cast Steel,) runs in Bronze Boxes, which are so made of two parts as easily to be adjusted when worn loose, and can with little

trouble, always be kept tight. The speed of the Power is such that a larger pulley is used on the Thresher than on most others—driving stronger, with less liability of slipping of Bands, which last are made of Vulcanized India Rubber. The Separator makes a complete separation of Grain from the Straw, leaving it in the best condition for the Fan Mill; thus saving the labor of several men, and doing the work better.

Fan Mills of various sizes, for Hand, or fitted to be driven by the Power, at same time of threshing. Also, Saw Mills in complete order.

The Double Horse Power is capable, with 3 or 4 men, of threshing from 125 to 200 bushels of Wheat or Rye, and the Single one from 75 to 100 bushels, or double that quantity of Oats per day. They are warranted to perform as above, or may be returned to us or our Agents, of whom they were purchased within 3 months, and the purchase money refunded.

They may be had in Rochester, Buffalo, or any of the principal ports on the lower or upper lakes, by adding transportation.

Good agents will attend to the sale of them in those places.

The prices will be, for Single Powers,..... \$85 00

“Thresher and Separator,..... 35 00

“Bands, Wrench, Oil Can, extra pieces, 5 00—\$125 00

Best Double Machines, Complete, (\$25 more on,) 150 00

Fan Mills, from, \$22 to \$23

Saw Mill, complete,..... \$35

Also “Wheeler’s” Machines, improved this season,

Single Setts, complete,.....\$120 00

Double do. do. 145 00

Terms Cash, or approved Notes or Acceptances, with Interest.

To good Agents in new locations liberal terms will be given.

For further particulars, see new issue of Catalogue, or apply personally or by letter at the

Albany Agricultural Works, Warehouse and Seed Store, of

EMERY & CO.

August 1, 1850. 369 & 371 Broadway, Albany, N. Y.

The Farmers' Encyclopedia,

BY C. W. JOHNSON. Adapted to the United States, by G. EMERSON, Philadelphia, 1850. In one large octavo volume, 1173 pages, containing the latest discoveries and improvements, in Agriculture, with numerous plates of Live Stock, Farming Implements, &c.

“We are fully convinced that such an amount of valuable knowledge for farmers can be found in no other work in so cheap and convenient a form. In fact, no farmer who pretends to be well informed in his profession should be without this book.”—*New Genesee Farmer.*

“An excellent work, fit to be distributed in premiums by Agricultural Societies. How much better, and in better taste, than the amount of its cost in money.”—*J. S. Skinner.*

Sold by L. TUCKER, Albany; A. HART, Philadelphia; DERY & CO., Buffalo; W. D. TICKNOR & CO., Boston; and the principal booksellers in the Union. Price \$4. (Cost of the imported work in 1 vol. without any plates, \$14.) July 1—tf.

Full Blood Berkshire Pigs.

THE subscriber offers for sale a fine lot of young Boars and Sows, at prices from \$2 to \$4. The boar they were raised from took the first premium at the Buffalo Fair. **R. B. BOWLAND.** Union Springs, July 1, 1850—2t.

Drain Tile Works,

63 Jay Street, North of Salamander Works, Albany.

THE subscriber is now manufacturing and prepared to fill orders for Horse Shoe, Sole, Round and Collar Drain Tile, of various sizes, from one to four inches in width and rise. The tile is cut sixteen inches in length, and will be of a superior quality. The price will vary according to the size and shape, from \$10 to \$16 per thousand. Specimens of the article with the prices will soon be distributed to all the agricultural stores in the State. Presidents of county societies adjoining the river and canals, will please send their address with directions to whom a box containing the different sizes of Tile will be forwarded free of charge.

July 1, 1850—tf. A. S. BABCOCK.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN of Massachusetts. Two large octavo vols.—price, neatly bound, the same as published in Nos., \$5. For sale at the office of **THE CULTIVATOR.**

Wire for Fences.

IRON WIRE FOR FENCING, constantly for sale at New-York prices. **Z. HOSMER,** April 1, 1850—6t. 110 Milk St., Boston.

Circular.

THE subscribers are making and vending J. W. SHERMAN'S

New Seed Drill and Broadcast Sower,

Constructed upon a new principle; cheaper, simpler, and more durable and accurate, than any similar machine now in use.

We are building three different qualities of these machines. No. 1, is a superior Drill and Broadcast Sower, and will sow fine Manure (such as Plaster, Ashes, Guano, &c.,) Broadcast, or in the drill rows, any desirable quantity per acre, at the same time of drilling in the grain. It is well finished, substantially made, of good material, and warranted—at the low price of \$65.

No. 2, is built for drilling all kinds of grain. It will also sow fine manure, broadcast, on crops. Price \$55.

No. 3, is a plain Wheat Drill; simple, accurate, substantial. Price \$45. None of our machines will clog in the runs; they cannot do so with the most difficult kind of seed; THE DISTRIBUTING PRINCIPLE BEING ENTIRELY NEW.

We are prepared to supply all orders. Those wishing to purchase drills, would do well to see ours before purchasing elsewhere. The sooner the order is given, the more sure you will be of getting your Drill in time.

N. B.—Persons wishing to make or sell our Drills, are offered a good chance.

A large descriptive bill will soon be issued with cuts. All communications or inquiries [post paid,] will receive prompt attention. Address Sherman, Foster & Co., Palmyra, Wayne county, N. Y. Those wishing it, can see the machines at Foster, Jessup & Co's Machine shop, Palmyra; where they will also find the best Thresher and Separator, Revolving Horse-rake, (spring teeth,) wheel Cultivators, and other agricultural implements; warranted superior. Call and see.

Mr. SHERMAN is agent for the sale of McCormick's Virginia Reaper.

Palmyra, June 1, 1850—2t.

Agricultural Warehouse and Seed Store.

No. 197 Water street, (near Fulton,) New-York.



THE subscribers would respectfully invite the attention of planters and dealers in Agricultural and Horticultural Implements, Garden and Field Seeds, &c., &c., to their large and varied assortment of Garden and Field tools, &c., which they are selling at the very lowest rates that they can be procured in the United States. Persons living at a distance can obtain an "illustrated" Catalogue, containing a list of prices, on application by letter, post-paid. Those ordering from us may depend upon their orders being promptly filled.

May 1, 1850—1t.

JOHN MAYHER & CO.,

THE HORTICULTURIST,

AND

Journal of Rural Art & Rural Taste.

EDITED BY A. J. DOWNING,

Author of "Landscape Gardening," "Designs for Cottage Residences," "Fruits and Fruit Trees of America," &c., &c.

TO all persons alive to the improvement of their gardens, orchards or country seats,—to scientific and practical cultivators of the soil,—to nurserymen and commercial gardeners, this Journal, giving the latest discoveries and improvements, experiments and acquisitions in Horticulture, and those branches of knowledge connected with it, will be found invaluable. Its extended and valuable correspondence presents the experience of the most intelligent cultivators in America; and the instructive and agreeable articles from the pen of the Editor, make it equally sought after by even the general reader, interested in country life. The "FOREIGN NOTICES" present a summary from all the leading Horticultural Journals of Europe; the "DOMESTIC NOTICES," and ANSWERS TO CORRESPONDENTS, furnish copious hints to the novice in practical culture; and the numerous and beautiful Illustrations,—Plans for Cottages, Greenhouses, the Figures of New Fruits, Shrubs and Plants, combine to render this one of the cheapest and most valuable works on either side of the Atlantic.

THE FIFTH VOLUME OF THE HORTICULTURIST will be commenced on the 1st of July, 1850. All or either of the back vols. can be supplied. New subscribers will be furnished with the first four vols. for \$10.

TERMS—Three Dollars per year—Two copies for Five Dollars. All payments to be made in advance, and orders to be post paid.

All Agents for THE CULTIVATOR, and Post Masters generally, are invited to act as Agents for THE HORTICULTURIST.

LUTHER TUCKER,

Albany, June, 1850. Publisher Cultivator Office, Albany, N. Y.

Poultry Books.

THE American Poulterer's Companion, by C. N. BEMENT—price \$1.

The American Poultry Yard, by D. J. BROWNE and SAMUEL ALLEN—price \$1.

The American Fowl Breeder, by an Association of Practical Breeders—price 25 cents.

For sale at the office of THE CULTIVATOR.

Importation and Sale of Stock.

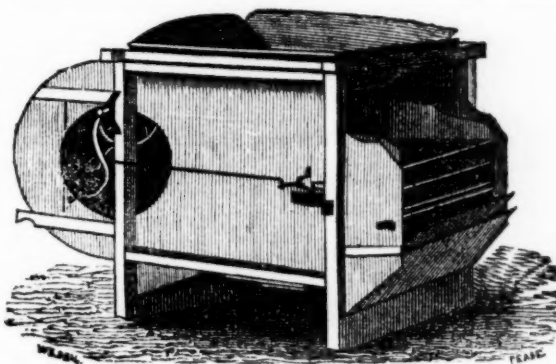
MR. L. G. MORRIS, of Mount Fordham, Westchester County, N. Y., left New-York on the 17th April, for Europe. One of his main objects is to obtain agricultural information generally, and especially to purchase such domestic animals as are calculated to improve the stock of the United States. He purposes to attend the sale of the Short-horn cattle belonging to the estate of the late THOMAS BATES, Esq., of Kirkleavington, Yorkshire; but will not confine his purchases to that herd. He expects to return to America in September next, and the second annual sale of cattle from his own herd, will take place in October. Whatever stock he may import, will be at his place at the time of sale. Printed catalogues of the animals to be sold, will be issued in due time.

June 1, 1850—4t.

The Old Gifford Morgan,

THE highest blooded Morgan Stallion now remaining, will stand the coming season at the stable of Benjamin Gates, in Walpole, N. H. Terms \$25. \$5 of which to be paid at the time of service, and the remaining \$20 if the mare prove in foal.

Pasturage furnished on reasonable terms. A. ARNOLD, Walpole, May 1—5t.* Agent for the Proprietors.

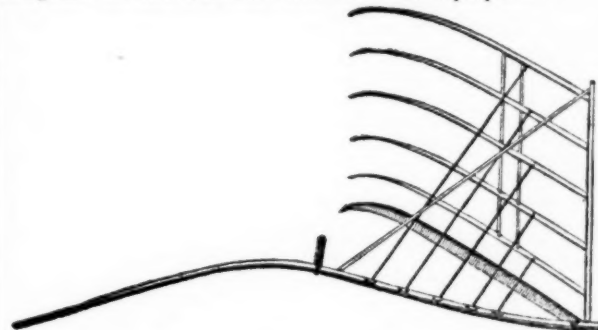


I. T. GRANT & CO.'S

PATENT FAN MILLS AND CRADLES. We continue to manufacture these celebrated Mills and Cradles.

They have been awarded six first premiums at the New-York State Fairs, and at the great American Institute in New York, and several County Fairs, always taking the first premium over all other mills. The manufacturers feel confident, therefore, in offering these mills to the public, that they are the best in use. During the year 1847 they were introduced into England, by Mr. Slocum, of Syracuse. They were very favorably noticed by the English papers; and from a communication of Mr. S.'s, published in the Transactions of the N. Y. State Ag. Society, for 1847, it will be seen that they were tried by several large farmers, and highly approved. One farmer, it is stated, set aside an almost new winnowing machine, for which he paid £18, (\$90) and used Grant's for cleaning a crop of 300 qrs. (2,700 bushels) of wheat, and several hundred bushels of mustard seed. We have lately made some valuable improvements in the article, though the price remains the same as before.

Our fans are extensively used and highly approved at the south, for cleaning rice. We are permitted to make the following extracts from letters received from Hon. J. R. Poinsett, of South Carolina:—"The fan you sent last summer, [1848] has been successfully used to clean dirty rice, and winnow that from the threshing floor. It answers every purpose." In relation to another of our fans, he writes, (April 23, '49.)—"Both this and the first mill you sent, work very well; and the last, which is the largest that can be well worked by a man, cleans the dirty rice perfectly, and is altogether the best wind-fan I ever used for that purpose."



Our Cradles have taken the first premiums at two New York State Fairs, and are considered the best in use.

The great encouragement we have received from dealers and agriculturists, has induced us to greatly enlarge our business, and we hope by strict attention, to merit a further patronage.

Orders will be thankfully received, and receive prompt attention.

I. T. GRANT & CO.

Junction P. O., Rens. Co., 8 miles north of Troy

May 1, 1850—1t.

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Agricultural and Horticultural Implements, and
Field and Garden Seeds.

UPWARDS of one hundred different kinds of Plows, and a corresponding variety of all other Implements for the Farmer, Planter and Gardener; embracing the largest and most complete assortment to be found in the United States. Also, Field and Garden Seeds, a large and varied assortment. A. B. ALLEN & CO.,
August 1, 1850.—189 & 191 Water St., New-York.

Allen's Improved Portable

Railroad Horse Power, Thresher and Separator.

THE advantages of the above horse powers are—1. They occupy but little more space than a horse. 2. They can be moved by the weight of the horse only, by placing the machine at an angle of 10 or 15 degrees. 3. They are easily transported, simply constructed, not liable to get out of order, and move with little friction.

The Overshot Threshers consist of a small spiked cylinder with a concave top, and possess these advantages. 1. They have a level table for feeding, thus enabling the tenders to stand erect, and control the motion of the horse and machine by means of a brake, by which accidents are avoided. In consequence of the spikes lifting the straw and doing the work on the top, stones, blocks, &c. drop at the end of the table, and are not carried between the spikes. 3. The overshot cylinder does not scatter the grain, but throws it within three feet of the machine. 4. This arrangement also admits of attaching a separator, high enough from the floor or ground to allow all the grain to fall through it, while the straw is deposited by itself in the best condition for binding. 5. Neither grain nor straw are broken by this machine. 6. The cylinder is long, which admits of faster and more advantageous feeding; it is smaller and with fewer teeth than ordinary threshers, thus admitting of more rapid motion and faster work with less power; and the diminution of teeth in the cylinder is fully made up by an increased number in the concave top, which is stationary. 7. The separator is a great advantage in diminishing the labor of raking out the straw, as it leaves the grain in the best condition for the fanning mill. Three men with a single power, can thresh 100 to 150 bushels of wheat or rye per day; and four men with a double power, twice that quantity. All the above are compact, and can be carried where wanted, complete, or they may be readily taken apart and packed for distant transportation by wagon or otherwise.

Price of single Power,.....	\$80
“ “ Thresher,.....	\$28
“ Separator and fixtures,.....	\$7
“ Bands for driving, etc.,.....	\$5
“ Wood-sawing machine, complete, and in running order,	\$35

Price of double Power,.....	\$100
“ with Thresher, Separator, &c.,.....	\$145 to \$150

All the above are sold singly or together, as desired, and are warranted to work well and give satisfaction.

A. B. ALLEN & CO.,
Aug. 1—21. 189 & 191 Water Street, New-York.

Choice Sheep for Sale.

THE subscriber having determined to quit the farming business, offers his entire flock of Sheep for sale. They have been bred with great care for over 20 years, with a view to make them heavy and fine.

They now shear three and a-half pounds per head, and the wool sold last year, at the Kinderhook Depot, for 47 cents per pound. Specimens of them will be at the State Fair.

Also, one Imported Ayrshire Cow, with her last two calves, both heifers.

DANIEL S. CURTIS.

Canaan Center, N. Y., Aug. 1—21.

Albany Burr Mill Stone Factory.

A. DAM R. SMITH, (late of Troy,) having located at the Corner of Broadway and Quackenbush streets, (three blocks above the Delavan House,) ALBANY, N. Y., invites the attention of Millwrights and others to the stock on hand, which, with his facilities for manufacturing, must render it advantageous for them to call upon him before purchasing elsewhere.

He keeps also, a large supply of Bolting Cloth, Screen Wire, Plaster of Paris, and other articles used in Milling, which will be disposed of on liberal terms.

August 1—31.*

Great Sale of Short Horn Cattle.

THE subscriber will offer for sale, without reserve, at public auction, on Thursday, the 29th day of August next, at 1 o'clock, P. M., on the farm of J. F. Sheafe, Esq., at New Hamburg, Dutchess Co., New York, about 35 head of Short horn cattle, including cows, heifers and calves.

This herd was mostly bred by Mr. Sheafe, and I do not hesitate to say, that I think it one of the very best in the United States; and I have seen and particularly examined nearly all of them. Great attention was paid in the commencement of this herd, to the milking properties of the animals forming it; and this, together with fine points and good growth and constitution, have been steadily kept in view in its breeding. There is but one cow in the herd which gives less than 20 quarts per day, in the best of the milking season, while one has given over 29 quarts per day, and made 15 pounds 3 ounces of butter per week, and two others have given respectively, 31 and 36 quarts per day. Their color is of the most fashionable and desirable kind—red, red-and-white and a rich strawberry roan—only one white cow in the lot. They are of good size and fine style, and all in calf to the superb imported bull Exeter, who will also be offered for sale at the same time.

Pedigree of Exeter.—Exeter is of the Princess tribe of Short horns—was calved in June, 1848, and bred by Mr. John Stephenson, of Woburn, Durham, England. He was got by Napier, (6,238), out of Jessamine, by Commodore, (3,452)—Flora, by Belvidere, (1,706)—Jessie, by Belvidere, (1,706)—Cherry by Waterloo, (2,816) &c. See English Herd Book, Vol. V., for full pedigree.

Exeter was selected for Mr. Sheafe, by a first rate judge of Short horn stock, and was considered one of the very best bulls in England. Quite a high price was paid for him; and it is believed that his superior, if even his equal, has never before been imported into this country. He carries an enormous brisket for his age, and his style, handling, and quality are of the finest kind. His color is mostly a beautiful yellow red, which is a bright red with a fine golden or saffron undertinge, arising from a rich yellow skin. He is the only bull of this peculiarly desirable red, ever imported into America. Calves got by him, out of this herd of cows, will fetch a high price the moment they are dropped.

Mr. Stephenson, the breeder of Exeter, now stands at the head of his class in England, and his stock is of the highest repute. It is entirely of the Princess tribe, and traces its pedigrees, without any alloy or Galloway blood, back to pure Shorthorns, for upwards of two hundred years; a matter of no small consideration to those who wish a superior fresh cross.

Catalogues of the above stock, with pedigrees in full, are now ready for distribution.

Southdown Sheep.—A choice flock of this superior breed of mutation sheep, will be sold on the same day as above.

Suffolk Swine.—One boar and several breeding sows and pigs, of this fine breed of swine.

Working Oxen.—A handsome pair of red working oxen.

A. B. ALLEN, 189 Water st., New-York

June 1, 1850—31.

THE CULTIVATOR

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All subscriptions to commence with the volume, (the Jan. No.) and to be PAID IN ADVANCE.

All subscriptions, not renewed by payment for the next year, are discontinued at the end of each volume.

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NEW-YORK—M. H. NEWMAN & Co., 199 Broadway.

BOSTON—J. BRECK & Co., 52 North Market-st., and E. WIGHT, 7 Congress-st.

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